

A Step Toward The Future

1996-1998



Graduate Catalog



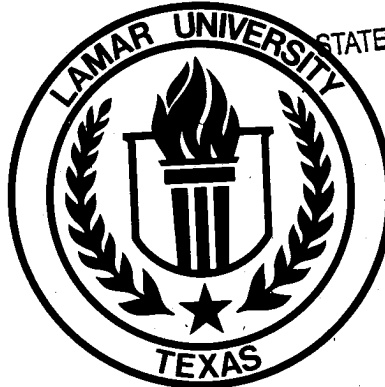
L A M A R
U n i v e r s i t y

Member of The Texas State University System

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AUG 21, 1997

STATE APPROVING AGENCY



LAMAR UNIVERSITY

A Member of The Texas State University System

COLLEGE OF GRADUATE STUDIES 1996-98 • Catalog • Volume 43 Number 2

Twenty-fourth catalog issued with announcements for 1996-98.

Founded in 1923, and established as a four-year coeducational, state-supported college on September 1, 1951.

The provisions of this bulletin do not constitute a contract, expressed or implied, between any applicant, student and faculty member in Lamar University. Lamar University reserves the right to withdraw courses at any time, change fees, calendars, curricula, graduation procedures and any other requirement affecting students. Changes become effective when the proper authorities so determine the application to both prospective students and to the students already enrolled. For additional and complete information refer to the Lamar University General Bulletin.

Lamar University is an equal opportunity/affirmative action educational institution and employer. Students faculty and staff members are selected without regard to their race, color, creed, sex, age, handicap or national origin, consistent with the Assurance of Compliance with Title VI of the Civil Rights Act of 1964; Executive Order 11246 as issued and amended; Title IX of the Education Amendments of 1972, as amended; Section 504 of the Rehabilitation Act of 1973. Inquiries concerning application of these regulations may be referred to the Vice President for Administration and Counsel.

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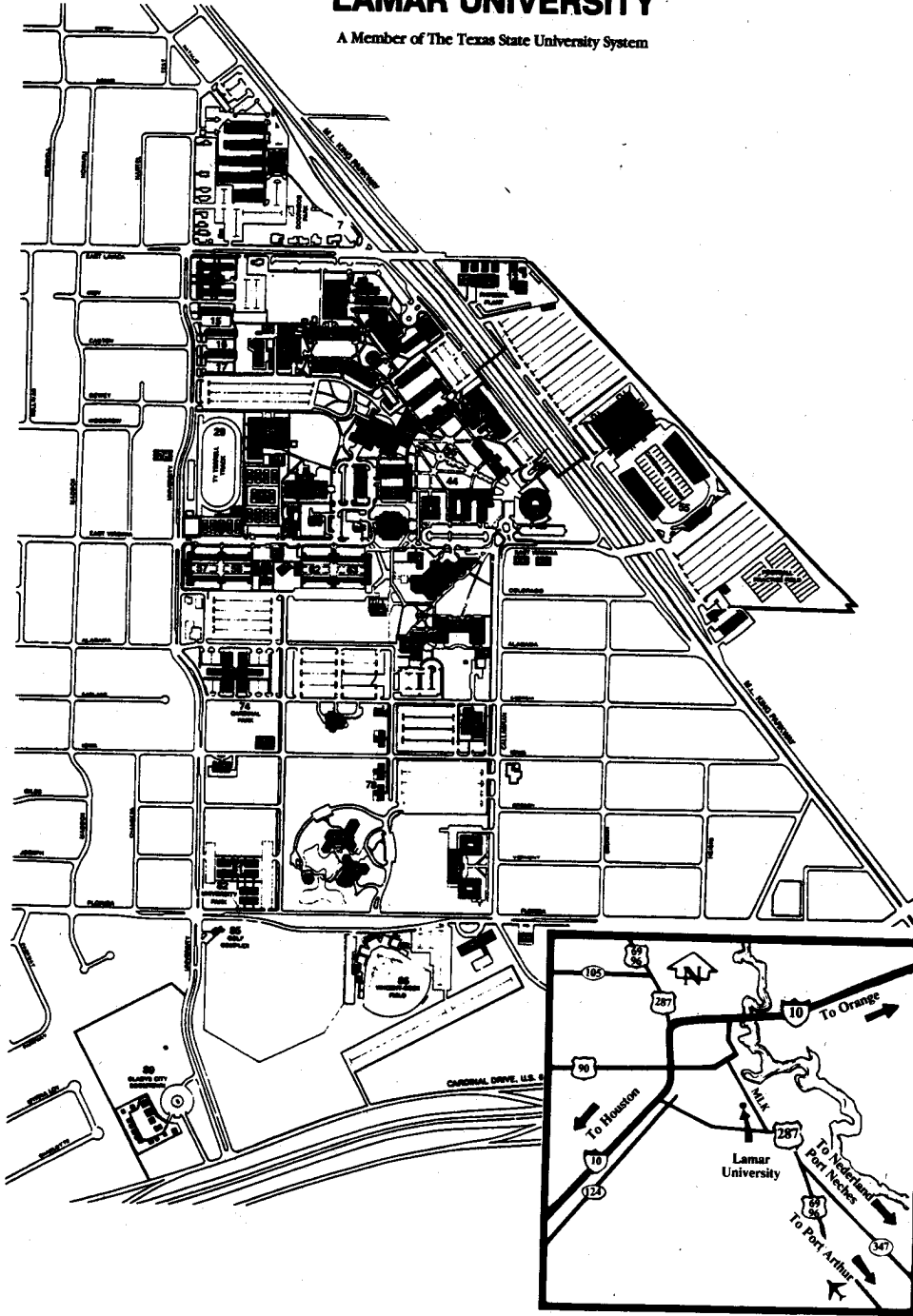
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LAMAR UNIVERSITY

A Member of The Texas State University System



LEGEND TO MAP OF LAMAR UNIVERSITY

Administration (Plummer Bldg.)	54	Church of Christ Center	67
Alumni House	49	Episcopal Center	60
Art Building	11	LDS Institute of Religion	28
Biology (Hayes Bldg.)	21	Newman Catholic Center	66
Bookstore	33	Wesley Foundation Methodist Center	59
Business (Galloway Bldg.)	36	Residences:	
Campus Planning	12	Unit I	17
Cardinal Park	74	Unit II	16
Cardinal Stadium	55	Unit III	15
Chemistry Bldg.	24	University Drive Apartments	81
Communication Bldg.	22	(Men's residence halls)	
Computer Energy Management Facility	71	Combs	62
Continuing Education	47	Morris	63
Custodial Services	41	Plummer	73
Dental Hygiene Clinic	9	Shivers	84
Dining Hall	40	(Women's residence halls)	
Dishman Art Gallery	10	Brooks	84
Doornbos Park	7	Campbell	58
Early Childhood Development Center	87	Gentry (sorority)	8
Education Bldg.	69	Gray	57
Engineering I (Lucas Bldg.)	53	Science Auditorium	25
Engineering II (Parker Bldg.)	43	Setzer Student Center	32
Engineering III (Cherry Bldg.)	65	Shipping and Receiving	14
Faculty-Staff Dining Room	39	Speech and Hearing Center	79
Family and Consumer Sciences Bldg.	52	Student Services	45
Fraternity Row	78	Supply Center	42
Geology Bldg.	27	Technology, Institute of (Beeson)	6
Gladys City Boomtown	89	Tennis Courts	37
Golf Complex	85	Tennis Pro Shop	38
Gray Institute	83	Ty Terrell Track	29
Gray Library	51	University Park	82
Gym Annex	19	University Press	32
Hazardous Substance Research	77	University Theatre	22
Health Sciences (Mamie McFaddin Ward Bldg.)	9	Vincent-Beck Stadium	86
Health Center	48	Wimberly Bldg.	45
Information Center	46	Women's Gym	20
Institutional Advancement Bldg.	64		
J.B. Higgins Fieldhouse	56	MAJOR OFFICES	
KVLU Radio Station	22	Academic Deans (by College)	
Maes Bldg.	70	Arts and Sciences	9
McDonald Gym	30	Business	36
Mirabeau B. Lamar Statue	35	Education	69
Montagne Center	47	Engineering	65
Music Bldg.	23	Fine Arts and Communication	11
Physical Plant	13	Graduate Studies	45
Physics (Archer Bldg.)	34	Academic and Student Affairs	45
Placement Center	36	Academic Services	45
Police Department	41	Admissions Services	45
Pool (Indoor)	20	Computer Center	65
Pool (Outdoor)	18	Counseling and Testing	45
Post Office	41	Financial Aid	45
President's Home	76	Housing Office	41
Print Shop	42	Human Resources	88
Psychology Bldg.	26	Institutional Advancement	64
Public Services/Continuing Education	47	President's Office	54
Quadrangle	44	Registration and Records	45
Quick Copy Center	42	Traffic Office	7
Racquetball-Handball Court	31	Veterans Affairs	45
Recreational Pavilion	75		
Religious Centers			
Baptist Student Center	61		

1996-97 Calendar

Fall Semester – 1996

August 1996

- 20 Orientation Day
- 21 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
- 22 Registration
- 23 Registration
- 26 Classes Begin
- 27 Schedule revisions – late registration **with penalty fee**
Last day for schedule revisions and/or
late registration **with penalty fee**
- 28 Applications for December 1996 graduation begin

AUGUST

S	M	T	W	T	F	S
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September 1996

- 2 Labor Day – NO CLASSES
- 11 Twelfth Class Day

SEPTEMBER

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October 1996

- 4 Last day to drop or withdraw without academic penalty
- Last day to petition for no grade
- 7 Last day to apply for December graduation
- Last day to pay for diploma, cap, and gown

OCTOBER

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November 1996

- 4 Registration for Spring semester begins
- 14 Last day to drop and withdraw
- 27 Thanksgiving recess begins at 10:00 p.m.
Dining halls close at 6:00 p.m.
Residence halls close at 6:00 p.m.

NOVEMBER

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December 1996

- 1 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
- 11 Classes resume at 7:00 a.m.
- 10 Finals preparation day – no classes prior to 5:00 p.m.
Finals begin at 5:00 p.m.
- 10-17 Final examinations
- 18 Dining halls close at 9:00 a.m.
Residence halls close at 10:00 a.m.
Winter Mini-Session Begins
- 19 Grades for those graduating due by 8:30 a.m.
All other grades due by 4:00 p.m.
- 21 Commencement

DECEMBER

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Spring Semester – 1997

January 1997

- 10 Orientation Day
- 12 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
- 13 Registration
- 14 Registration
Winter Mini-Session Ends
- 15 Classes Begin
Schedule revisions – late registration **with penalty fee**
- 16 Last day for schedule revisions and/or
late registration **with penalty fee**
- 20 Martin Luther King, Jr. birthday – NO CLASSES
- 21 Applications for May 1997 graduation begin
- 31 Twelfth Class Day

JANUARY

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February 1997

- 25 Last day to drop or withdraw without academic penalty
Last day to petition for no grade

FEBRUARY

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March 1997

- 3 Last day to apply for May graduation
(graduate students only)
Last day to pay for diploma, cap, and gown
- 14 Spring recess begins at 5:00 p.m.
Dining halls and residence halls close at 6:00 p.m.
- 23 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.
- 24 Classes resume at 7:00 a.m.
- 28 Good Friday – NO CLASSES

MARCH

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April 1997

- 7 Registration for Summer and Fall begins
- 14 Last day to drop or withdraw

APRIL

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May 1997

- 6 Finals preparation day – no classes prior to 5:00 p.m.
Finals begin, 5:00 p.m.
- 6-13 Final examinations
- 14 Dining halls close at 9:00 a.m.
Residence halls close at 10:00 a.m.
Summer Mini-Session Begins
- 15 Grades for those graduating due by 8:30 a.m.
All other grades due by 4:00 p.m.
- 17 Commencement

MAY

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Summer Session – 1997 First Term

May 1997

29 Orientation day

June 1997

1 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.

2 Registration
Summer Mini-Session Ends

3 Classes begin – schedule revisions –
late registration **with penalty fee**

4 Application for August 1997 graduation begins
Last day for schedule revisions and/or
late registration **with penalty fee**

6 Fourth Class Day

9 Last day to apply for August graduation
(graduate students only)
Last day to pay for diploma, cap, and gown

16 Last day to drop or withdraw without
academic penalty
Last day to petition for no grade

17-19 Orientation Days

July 1997

1 Last day to drop or withdraw

4 Independence Day – NO CLASSES

9 Last class day

10 All grades due by 4:00 p.m.

MAY

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JUNE

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JULY

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Summer Session – 1997 Second Term

July 1997

9 Registration

10 Classes begin – schedule revisions and/or
late registration **with penalty fee**

11 Last day for schedule revisions and/or
late registration **with penalty fee**

15 Fourth Class Day

15-17 Orientation Days

23 Last day to drop or withdraw without
academic penalty
Last day to petition for no grade

22-24 Orientation Days

August 1997

7 Last day to drop or withdraw

14 Last class day
Dining halls and
Residence halls close at 6:00 p.m.

15 Grades for those graduating due by 8:30 a.m.
All other grades due by noon

16 Commencement

AUGUST

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1997-98 Calendar

Fall Semester - 1997

August 1997

19	Orientation Day
20	Residence halls open at 1:00 p.m. Dining halls open at 4:30 p.m.
21	Registration
22	Registration
25	Classes Begin
	Schedule revisions - late registration with penalty fee
26	Last day for schedule revisions and/or late registration with penalty fee
27	Applications for December 1997 graduation begin

September 1997

1	Labor Day - NO CLASSES
10	Twelfth Class Day

October 1997

3	Last day to drop or withdraw without academic penalty Last day to petition for no grade
6	Last day to apply for December graduation (graduate students only) Last day to pay for diploma, cap, and gown

November 1997

10	Registration for Spring semester begins
13	Last day to drop and withdraw
26	Thanksgiving recess begins at 10:00 p.m. Dining halls close at 6:00 p.m. Residence halls close at 6:00 p.m.
30	Residence halls open at 1:00 p.m. Dining halls open at 4:30 p.m.

December 1997

1	Classes resume at 7:00 a.m.
9	Finals preparation day - no classes prior to 5:00 p.m. Finals begin at 5:00 p.m.
9-16	Final examinations
17	Dining halls close at 9:00 a.m. Residence halls close at 10:00 a.m. Winter Mini-Session Begins
18	Grades for those graduating due by 8:30 a.m. All other grades due by 4:00 p.m.
20	Commencement

AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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Spring Semester – 1998

January 1998

- 9 Orientation Day
 11 Residence halls open at 1:00 p.m.
 Dining halls open at 4:30 p.m.
 12 Registration
 13 Registration
 Winter Mini-Session ends
 14 Classes Begin
 Schedule revisions – late registration **with penalty fee**
 15 Last day for schedule revisions and/or
 late registration **with penalty fee**
 19 Martin Luther King, Jr. birthday – NO CLASSES
 20 Applications for May 1998 graduation begin
 30 Twelfth Class Day

February 1998

- 24 Last day to drop or withdraw without academic penalty
 Last day to petition for no grade

March 1998

- 2 Last day to apply for May graduation
 (graduate students only)
 Last day to pay for diploma, cap, and gown
 13 Spring recess begins at 5:00 p.m.
 Dining halls and residence halls close at 6:00 p.m.
 22 Residence halls open at 1:00 p.m.
 Dining halls open at 4:30 p.m.
 23 Classes resume at 7:00 a.m.

April 1998

- 6 Registration for Summer and Fall begins
 9 Last day to drop or withdraw
 10 Good Friday – NO CLASSES

May 1998

- 5 Finals preparation day - no classes prior to 5:00 p.m.
 Finals begin, 5:00 p.m.
 5-12 Final examinations
 13 Dining halls close at 9:00 a.m.
 Residence halls close at 10:00 a.m.
 Summer Mini-Session Begins
 14 Grades for those graduating due by 8:30 a.m.
 All other grades due by 4:00 p.m.
 16 Commencement

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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Summer Session – 1998 First Term

May 1998

- 28 Orientation day
- 31 Residence halls open at 1:00 p.m.
Dining halls open at 4:30 p.m.

June 1998

- 1 Registration
Summer Mini-Session ends
- 2 Classes begin – schedule revisions –
late registration **with penalty fee**
- 3 Application for August 1998 graduation begins
Last day for schedule revisions and/or
late registration **with penalty fee**
- 5 Fourth Class Day
- 8 Last day to apply for August graduation
(graduate students only)
Last day to pay for diploma, cap, and gown
- 15 Last day to drop or withdraw without academic penalty
Last day to petition for no grade
- 16-18 Orientation Days
- 30 Last day to drop or withdraw

July 1998

- 3 Independence Day Observed – NO CLASSES
- 8 Last class day
- 9 All grades due by 4:00 p.m.

MAY

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JUNE

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JULY

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Summer Session – 1998 Second Term

July 1998

- 8 Registration
- 9 Classes begin – schedule revisions
and/or late registration **with penalty fee**
- 10 Last day for schedule revisions
and/or late registration **with penalty fee**
- 14 Fourth Class Day
- 14-16 Orientation Days
- 22 Last day to drop or withdraw without academic penalty
Last day to petition for no grade
- 21-23 Orientation Days

August 1998

- 6 Last day to drop or withdraw
- 13 Last class day
Dining halls and residence halls close at 6:00 p.m.
- 14 Grades for those graduating due by 8:30 a.m.
All other grades due by noon
- 15 Commencement

AUGUST

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Dean of Graduate Studies: Robert D. Moulton, Ph.D.
Editor: Cynthia L. Hicks



A larger-than-life sculpture of Mirabeau B. Lamar, the father of Texas education, is located in the center of the Beaumont campus quadrangle.

General Information

Location

The Lamar University campus is located in Beaumont, Texas. With a population of more than 114,000, Beaumont is a diversified city, home not only to the University but also to businesses and industry stemming from a strong petrochemical and agricultural base. World-renowned companies are located in Beaumont to take advantage of the area's resources and its educated workforce.

A host of cultural attractions offer a variety of leisure options from world-class museums and symphony presentations to shopping districts and many spring and fall festivals. A civic center, convention center and coliseum draw professional entertainers and a wide variety of business, social and professional groups to the city. Beaumont is convenient to lake, river and ocean recreation, located only a few miles from the balmy Gulf Coast and little more than an hour from the Big Thicket National Preserve, large lakes and piney woods.

The campus is home to the stately Mary and John Gray Library, Montagne Center coliseum, Setzer Student Center, Gladys City Boomtown, several residence halls and state-of-the-art computing and engineering facilities, including a leading-edge interactive video laboratory. Lamar University welcomes visitors. Information regarding tours may be obtained from the Office of Admission Services, P.O. Box 10009, Beaumont, Texas 77710, phone (409) 880-8888.

History

Lamar University originated on March 8, 1923, when the South Park School District in Beaumont authorized its superintendent to proceed with plans to open "a Junior College of the first class." On September 17, South Park Junior College opened with 125 students and a faculty of 14. Located on the third floor of the South Park High School building, the college shared the library and athletic facilities with the high school. In 1932, separate facilities were provided and the name of the institution was changed to Lamar College, to honor Mirabeau B. Lamar, second president of the Republic of Texas and the "Father of Education" in Texas.

On June 8, 1942, as a result of a public campaign, a new campus was purchased and classes were held for the first time on the present campus in Beaumont. After World War II, the College grew to 1,079, and a bid to make Lamar University a state-supported senior college was introduced in the House of Representatives. The legislature approved the Lamar bill (House Bill-52) on June 4, 1949, creating Lamar State College of Technology effective September 1, 1951. Lamar was the first junior college in Texas to become a four-year state-supported college. Lamar continued to grow, building strong programs in engineering, sciences, business and education.

In 1962, a graduate school was established offering Master's degrees in several fields. The Doctorate in Engineering was established in 1971. In the same year, House Bill-590 became law changing the institution's status to the university level of higher education. Lamar State College of Technology, with an enrollment of 10,874, officially became Lamar University on August 23, 1971.

In 1969, an extension center was opened in Orange, and, in 1975, the long-standing private two-year Port Arthur College became Lamar University at Port Arthur. The Lamar University System, of which Beaumont was the primary component, was established by the 68th Session of the Texas Legislature with the passage of SB-620, which took effect in August 1983. In 1990, the Texas Higher Education Coordinating Board recommended

that all two-year programs at Lamar University be combined into the Lamar University Institute of Technology. The programs in the former College of Technical Arts, Allied Health programs, Office Technology and Restaurant/Institutional Food Management were placed in the new Institute. The Doctorate of Education in Deaf Education was established in 1993.

Lamar's growth has been steady and progressive, anticipating the evolving needs of its students. To facilitate this growth, the Texas legislature approved House bill-2313 to merge the Lamar University System with The Texas State University System. Effective September 1, 1995, Lamar University joined sister institutions Angelo State University, Sam Houston State University, Southwest Texas State University and Sul Ross State University.

Government

A board of nine regents, appointed by the Governor and approved by the State Senate for terms of six years, governs The Texas State University System. The Board of Regents delegates the direction of university affairs to the presidents, campus administrative officers and faculty.

Mission Statement

Lamar University is a comprehensive senior public university dedicated to providing a learning environment of the highest quality. The University is an educational, scientific, engineering, business, and cultural resource center committed to the three-fold mission of teaching, research and service. The University is committed to providing students with a liberal education in the context of a global and multicultural environment, and seeks partnerships with business, governmental, industrial and other educational organizations to more efficiently accomplish its goals.

Instructional Mission

Lamar University emphasizes quality teaching, student access to faculty, and careful student counseling. The University creates a liberating educational experience for each student which expands knowledge, awakens new intellectual interests, examines values, develops talents, provides new skills, and prepares each student to assume an effective role as a citizen in a democracy.

With historical commitments to quality educational programs in engineering, business, the arts and sciences, health sciences, education, and the visual and performing arts, the University focuses its unique strengths on significant problems of contemporary interest as evidenced by its recent initiatives in environmental science and engineering, gifted education, and deaf education.

Lamar University is strongly committed to the continual enhancement of teaching/learning methodologies and their systematic assessment.

The University's mission in graduate education is broad-based at the master's level, and includes the doctorate in engineering and in deaf education. Other doctoral-level educational opportunities for the region are enhanced through cooperative arrangements between Lamar University and other institutions of higher education. The University's mission in graduate education is characterized by an emphasis on professional fields of study.

Research Mission

As a comprehensive, regional university with extensive educational programs, Lamar University's academic efforts are directed to both applied and basic research, scholarship, and creative activities. Through its emphasis on the teacher-scholar model, the University encourages faculty members to be active in their respective disciplines, to involve both undergraduate and graduate students in research and creative pursuits, and to support the principle that research is inseparable from teaching.

Service Mission

The University's educational mission extends to all residents of the Southeast Texas area and, in special cases, beyond the region. In recognition of that mission, Lamar University provides a diverse outreach program including: credit and non-credit continuing education offerings responsive to the personal, career, and professional development needs of individuals in our region; specialized skills training and human resource development for business and industry on the Gulf Coast; and public service activities that respond to unique regional educational needs and cultural interests.

The University contributes to the cultural life of the region through cultural and artistic presentations and events utilizing the talents of faculty, students, and visiting lecturers, artists, and performers.

Students, faculty, and staff are encouraged to be involved in civic, cultural, service, and professional activities. By such volunteer and consultative activities, members of University demonstrate their citizenship within the larger community.

Accreditation and Approval

Lamar University is accredited by the Commission of Colleges of the Southern Association of Colleges and Schools to award Bachelor's, Master's and Doctor's degrees. The College of Graduate Studies is a member of the Council of Graduate Schools in the United States, the Conference of Southern Graduate Schools and the Texas Association of Graduate Schools.

Programs in the College of Engineering are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. In the College of Business, graduate programs are accredited by the American Assembly for Collegiate Schools of Business.

Other accreditations include Chemistry by the American Chemical Society; Music by the National Association of Schools of Music; the College of Education and Human Development by the National Council for the Accreditation of Teacher Education and the Texas Education Agency; programs in Family and Consumer Sciences by the American Dietetic Association; Sociology by the Council on Social Work Education; programs in Speech-Language Pathology and in Audiology by the American Speech-Language-Hearing Association and in Deaf Education by the National Council for Education of the Deaf and the Texas Education Agency. The University is also a member of a number of academic councils, societies, associations and other such organizations.

The Library

The eight-story Mary and John Gray Library building dominates the campus from its central location. Built to house a million volumes, the Library occupies six floors with on-line public access catalog to 900,000 volumes. Seating accommodates 1,200 students and faculty.

The first floor service areas include circulation, reference and interlibrary loans. The second floor houses reserve reading, current periodicals and government documents.

Four floors provide stacks for books and periodicals shelved in Library of Congress classification sequence from class A on the third floor through class Z on the sixth floor.

The seventh floor houses the library administrative offices, the Media Services Department, the Micro-Computer Lab and Special Collections.

The eighth floor offers expansion space for the future, but is presently shared with other University services. This spacious and elegant floor, furnished by community donors, serves as a University Reception Center for meetings and conferences.

Expanding library collections support continuously evolving academic programs. In addition to a collection of books and periodicals, the Library provides access to state and federal government documents and participates in the library networks which extend access to information resources. The Library coordinates multi-media programs on campus and is developing basic collections of equipment and materials for central distribution.

Research Office

The Research Office is administered by the Associate Vice President for Research, who chairs the Research Council. This office promotes and funds internal research; oversees sponsored programs and technology transfer as well as patent, copyright and intellectual property policies; establishes liaison between the university and state and national funding sources; and assures that proposed projects comply with institutional and governmental regulations. This office also provides assistance to faculty in the development and submission of grant/project proposals by locating funding sources and providing editorial assistance in proposal preparation.

Information Systems (Computing Facilities)

The University Information Systems Division is responsible for providing the computing services required by the academic, administrative, and research communities of Lamar University.

The Computer Center, a department of the Information Systems Division, provides for administrative computing with a VAX 7610 computer system. This system is capable of processing 35 million instructions per second (MIPS), has 512 million bytes of working memory and 40 billion bytes of disk storage. The operating system is Open VMS and is capable of handling in excess of 400 simultaneous users. The system supports two 1200 line per minute impact printers, one 600 line per minute impact printer, two laser printers, one reel to reel tape unit, and one cartridge tape unit.

The Computer Center supports the academic mainframe computer needs with a DEC 2100 Alpha computer running Open VMS and a DEC 5100 computer running ULTRIX. The DEC 2100 Alpha computer is capable of processing 70 million instructions per second (MIPS), has 126 million bytes of working memory, 14 billion bytes of disk storage, and cartridge tape unit. The DEC 5100 computer is capable of processing 19 million instructions per second (MIPS), has 64 million bytes of working memory, and 3.4 million bytes of disk storage. Current plans are to replace the DEC 5100 with a DEC 2100 running Digital UNIX and to move the John Gray Library operation from the VAX 7610 to a stand alone DEC 2100 running Open VMS.

General use computer labs for students are located at various strategic locations on the campus. These labs utilize personal computers which can be used as terminals or workstations. The campus computer systems are connected using a fiber optic backbone which allows high speed data transmissions and connection to the Internet.

Early Childhood Development Center

Lamar University's Early Childhood Development Center is located at 950 East Florida. The Center provides high quality extended day-care services and pre-school, pre-kindergarten, and kindergarten programs for children between the ages of 18 months and five years.

The Center is staffed with degreed teachers who create a stimulating environment and provide unlimited opportunities for learning. In addition to providing care for young children, the Center, under the administration of the Department of Family and Consumer Sciences and the College of Education and Human Development, provides a site for college students to observe and work with children as part of their course work and training. The Center is accredited by the National Academy of Early Childhood Programs.

The Early Childhood Development Center accepts children on a part-time or full-time basis with the fees based on the number of hours children are in attendance.

Career Center

A full range of testing services is provided at 102 Galloway Business Building for aptitude, achievement, and career interests. Professional staff assist students with concerns, questions, problem solving, adjustment, decision making, goal planning, testing and skill development. Staff will refer students to other offices and personnel in accord with the needs and interests of the individual.

Educational counseling is available. In order to best serve as many students as possible, problems of a long-term, therapeutic nature cannot be addressed; however, initial consultation is available and, when feasible, referral to campus and community resources.

The Center coordinates testing required by the University; provides individual interest, aptitude, and personality assessment; and, as a National Test Center, administers the following:

- SAT (Scholastic Aptitude Test) for undergraduate admissions. The SAT II Subject Area Tests are also given for students who wish to receive college credit (See Subject Area Tests).
- ACT (American College Testing Program) may be used instead of the SAT for undergraduate admissions.
- TASP (Texas Academic Skills Program) is required of all students before completion of 9 semester hours (unless exempted).
- PreTASP is used for some students in the admissions process to determine if developmental courses and special advising are needed for the student to have academic success.
- CLEP (College Level Examination Program) may be used to get credit by examination. See detailed description of CLEP elsewhere in this catalog.
- ORE (Graduate Record Exam required for admission to many graduate schools.
- GMAT (Graduate Management Admission Test) is required for admission to graduate Colleges of Business.
- LSAT (Law School Admission Test).
- MCAT (Medical College Admission Test).
- MAT (Miller Analogies Test) required for admission to some graduate programs.

The Career Center provides five core services:

- 1) Career Assessment, testing, exploration and decision making. This is appropriate for all students, and is particularly important for the person who is trying to make a decision on a major.
- 2) Training – seminars on topics of resume writing, interviewing and the job search are taught many times each semester. Internet possibilities and videotapes are also used in training.
- 3) Part-time job placement, summer jobs and internships.
- 4) Full-time job placement and on-campus recruiting, plus a resume referral system are available to graduating students and alumni.
- 5) The teachers career fair is held in April each year and features sixty school district recruiters to interview teaching candidates.
- 6) The Career Fair for all majors is held in February each year and affords students the opportunity to explore careers and to meet with future employers.
- 7) The Career library has information about employers, and has resources about career planning on video, hard copy and computer formats.

Information and registration forms for tests are available at 102 Galloway Building, phone 409-880-8444.

Health Center

The university maintains a Health Center for use by Lamar University, Beaumont campus, students for out-patient services. The student Health Center offers medical services, use of a Class A pharmacy, short-term psychological counseling, and health education to students presenting a current validated ID during regular hours when the university is in session. When the university is not in session, health care becomes the individual student's responsibility.

A physician is available during regular hours to treat students for minor acute illnesses or injuries that do not require constant supervision. No appointment is needed and students are charged only for medications and supplies, not for the doctor's visit. More extensive laboratory tests and x-rays are available if requested by the Health Center Director or physician. Should the need arise, expenses incurred for ambulance service or off-campus medical services become the responsibility of the student.

Veterans Education

Lamar is approved for educational training under all of the Veterans Educational Assistance programs.

Veterans and their dependents who are interested in attending Lamar under federal laws which provide educational assistance are directed to secure information by consulting the Office of Veterans' Affairs, Wimberly Student Affairs Building.

This office advises veterans on program and training opportunities, academic assistance and counseling.

Loan Funds and Scholarships

Financial assistance in the form of loans, grants and scholarships is available for a number of qualified students. Details may be obtained on request from the Director of Financial Aid, P.O. Box 10042, Beaumont, TX 77710.

Graduate Assistantships

Teaching and research assistantships are available in the various graduate departments. Additional information may be obtained either from the department chair or from the Dean of the College of Graduate Studies. Assistantships are awarded *only* to those individuals who meet all requirements for admission to a graduate degree program, including satisfactory GRE/GMAT scores.

Tuition and fees are not waived for graduate assistants, but nonresidents of Texas are not required to pay out-of-state tuition while employed as an assistant.

Teacher Certification

Lamar University has been approved by the Texas Education Agency to offer professional certification programs in administration, counseling and guidance, elementary, secondary, special education, reading, supervision and visiting teacher. Specific information concerning certification may be found in the College of Education and Human Development section of this catalog or may be obtained from the Director of The Division of Professional Services in the College of Education and Human Development.

Certification in Special Education and in Composite Science

The College of Education and Human Development has been approved by the Texas Education Agency to offer an alternative certification program in the areas of Generic Special Education K-12 and Composite Science (Secondary, 6-12). Information concerning either of the two programs may be obtained from the Division of Professional Services.

Fees and Expenses

Payment of Fees

Lamar University reserves the right to change fees in keeping with acts of the Texas Legislature and the University's Board of Regents.

A student is not registered until all fees have been paid in full or the student has paid the equivalent of a down payment on the installment plan (if available). Payment may be made by check, MasterCard/Visa/Discover/AMEX, money order or currency. Checks and money orders should be made payable to Lamar University and will be accepted subject to final payment. The University will not accept counter checks, postdated checks, credit card checks or altered checks. Excess payments will be refunded either in cash or check at the discretion of the University. Students on a "cash only" basis will be restricted to paying by MasterCard/Visa/Discover/AMEX, money order, cashier's checks, traveler's checks or currency.

Installment Payment Program

Tuition and selected fees may be charged on an installment plan. This plan provides for payments to be made in 3 installments for courses taken during the fall and spring semesters.

Students may enter into the installment program of the University upon verbal or written request. Students who do not pay in full the tuition and fees may be deemed to have agreed to the installment program if the student has paid at least the amount for the down payment (all installment program fees could also be applicable in this case). By registering for classes at the University, the student is understood to be in agreement with all the policies of the University. Reductions of fees for students in the installment program from drops or withdrawals are calculated as a percentage of the total fees assessed, not as a percentage of any partial payments.

A non-refundable service charge of \$20 is assessed for the 3 payment plan. A late fee of \$15 is assessed beginning the first day after an installment due date for each delinquent installment payment.

Students who are delinquent on installment will be prohibited from registering for class until the installment debt is paid in full. A single delinquent installment results in the entire remaining balance being immediately due and payable. Continued delinquency may result in withdrawal from the University. Also, holds are placed on academic records so that students cannot obtain transcripts until all installments are paid.

All delinquent installment accounts will be forwarded to a collection agency/credit bureau which results in additional fees of approximately one-third of the unpaid balance being added (Delinquent accounts must be paid at the collection agency; payment will **not** be accepted at the Lamar Cashier's Office.) All costs of collecting delinquent installments are payable by the student.

Tuition

Tuition is based upon the number of hours for which the student registers, and is determined by the student's classification as a Texas resident; a nonresident U.S. citizen; or a citizen of another country.* Determination of legal residence for tuition purposes is made on the basis of statutes of the state of Texas by the Admissions Office. Tuition is remitted to the State by the University. The current rate is \$30 per hour with a minimum \$120 (\$60 for Summer sessions) moving to \$32 in Fall 1996 and increasing by \$2 every Fall thereafter.

*Refer to the Coordinating Board, Texas College and University System "Rules and Regulations for Determining Residence Status" as revised, July 15, 1981, available in the Office of the Director of Admission Services.

Student Responsibility for Residence Classification

The responsibility of registering under the proper residence classification is that of the student. If there is any possible question of the student's right to classification as a resident of Texas, it is his/her obligation, prior to or at the time of registration, to raise the question with the Director of Admissions and have his/her status officially determined.

Every student who is classified as a resident student but who becomes a nonresident at any time by virtue of a change of legal residence by his/her own action or by the person controlling the student's domicile, is required to notify the Dean of Records and Registrar.

Publication of and Public Access to Thesis/Field Study/ Dissertation Abstracts

The Graduate Council requires that thesis, field study, and dissertation abstracts be published by University Microfilms. Fees for this service are included in the binding fees for the two copies of the thesis, field study, or dissertation that go to the library (one for the stacks and one for archives). Thus, the binding fees are \$40 for the first two copies of a thesis and \$50 for the first two copies of a field study or dissertation. The fee is \$13.65 for each additional bound copy. If copyrighting is desired, another \$35 is charged. All theses, field studies, and dissertations will be placed in the library if permission to do so is granted by the student.

Refund of Tuition and/or Fees

Students requesting a refund of tuition and/or fees resulting from dropped courses or from withdrawing from the University should direct questions to the Cashiers' Office. Refunds are calculated as a percentage of *total* fees assessed, *not* as a percentage of partial payments on installments. Refunds are generally processed at the end of the second week past the 12th semester day for Fall or Spring (2 weeks after the 4th semester day for summer session).

Dropped Courses

Students who drop courses during the drop period will receive a refund on tuition and fees, based on the following:

Fall or Spring Semester

1. Through the twelfth semester day, 100 percent.
2. After the twelfth semester day, no refund.

Summer Session

1. Through the fourth semester day, 100 percent.
2. After the fourth semester day, no refund.

Withdrawal from the University

Any student officially withdrawing during the first part of the semester will receive a refund on tuition, Setzer Center, student service, course, library, computer use, general use and private lesson fees according to the following schedule:

Fall or Spring Semester

1. Prior to the first semester day, 100 percent.
2. During the first through fifth semester days, 80 percent.
3. During the sixth through tenth semester days, 70 percent.
4. During the eleventh through fifteenth semester days, 50 percent.
5. During the sixteenth through twentieth semester days, 25 percent.
6. After the twentieth semester day, none.

Summer Session

1. Prior to the first semester day, 100 percent.
2. During the first, second or third semester day, 80 percent.
3. During the fourth, fifth or sixth semester day, 50 percent.
4. Seventh semester day and after, none.

The \$10 Property Deposit is refundable upon written request by the student to the Cashiers' Office.

Withdrawing from the University does not relieve the student of any financial obligations under the Installment Payment Program or for any student loans as these are the student's legal financial commitments.

NOTE: Students withdrawing from the University are required to surrender their Student Identification Card and their Parking Permit. Also, withdrawal from the University precludes the student from receiving a refund for dropped courses.

Summaries of Fees

Additional fees and charges which are applied on a selective basis are listed following the Summary of Fees.

Lamar University Summer 1996

No. Sem. Hours	Tuition		Stu. Serv. Fee	Gen. Use Fee	Setzer Center Fee	Property Deposit	Computer Use Fee	Library Use Fee	Total	
	Texas Resident	Non-Texas Resident							Texas Resident	Non-Texas Resident
1	\$60	\$222	\$15	\$12	\$15	\$10	\$3	\$3	\$118	\$280
2	60	444	30	24	15	10	6	6	151	535
3	90	666	45	36	15	10	9	9	214	790
4	120	888	60	48	15	10	12	12	277	1045
5	150	1110	69	60	15	10	15	15	334	1294
6	180	1332	69	72	15	10	18	18	382	1534
7	210	1554	69	84	15	10	21	21	430	1774
8	240	1776	69	96	15	10	24	24	478	2014
9	270	1998	69	108	15	10	27	27	526	2254
10	300	2220	69	120	15	10	30	30	574	2494

Parking: \$12; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply.
Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.

Lamar Institute Fall 1996/Spring 1997

No. Sem. Hours	Tuition		Stu. Serv. Fee	Gen. Use Fee	Setzer Center Fee	Property Deposit	Computer Use Fee	Library Use Fee	Total	
	Texas Resident	Non-Texas Resident							Texas Resident	Non-Texas Resident
1	\$120	\$246	\$15	\$12	\$30	\$10	\$3	\$3	\$193	\$319
2	120	492	30	24	30	10	6	6	226	598
3	120	738	45	36	30	10	9	9	259	877
4	128	984	60	48	30	10	12	12	300	1156
5	160	1230	75	60	30	10	15	15	365	1435
6	192	1476	90	72	30	10	18	18	430	1714
7	224	1722	105	84	30	10	21	21	495	1993
8	256	1968	120	96	30	10	24	24	560	2272
9	288	2214	135	108	30	10	27	27	625	2551
10	320	2460	138	120	30	10	30	30	678	2818
11	352	2706	138	132	30	10	30	30	722	3076
12	384	2952	138	144	30	10	30	30	766	3334
13	416	3198	138	156	30	10	30	30	810	3592
14	448	3444	138	168	30	10	30	30	854	3850
15	480	3690	138	180	30	10	30	30	898	4108
16	512	3936	138	180	30	10	30	30	930	4354
17	544	4182	138	180	30	10	30	30	962	4600
18	576	4428	138	180	30	10	30	30	994	4846
19	608	4674	138	180	30	10	30	30	1026	5092
20	640	4920	138	180	30	10	30	30	1058	5338

Note: Fees are subject to change by action of the Board of Regents or Texas State Legislature. A resolution before the Board of Regents at catalog presstime may increase the general use fee and other fees if approved.
Parking: Fall- \$32, Spring - \$22; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply.

Lamar Institute Summer 1997

No. Sem. Hours	Tuition		Stu. Serv. Fee	Gen. Use Fee	Setzer Center Fee	Property Deposit	Computer Use Fee	Library Use Fee	Total	
	Texas Resident	Non-Texas Resident							Texas* Resident	Non-Texas Resident
1	\$60	\$246	\$15	\$12	\$15	\$10	\$3	\$3	\$118	\$304
2	64	492	30	24	15	10	6	6	155	583
3	96	738	45	36	15	10	9	9	220	862
4	128	984	60	48	15	10	12	12	285	1141
5	160	1230	69	60	15	10	15	15	344	1414
6	192	1476	69	72	15	10	18	18	394	1678
7	224	1722	69	84	15	10	21	21	444	1942
8	256	1968	69	96	15	10	24	24	494	2206
9	288	2214	69	108	15	10	27	27	544	2470
10	320	2460	69	120	15	10	30	30	594	2734

Parking: \$12; ID: \$5; Property Deposit is a one-time fee; Other course and materials fees may apply.
Note: Fees are subject to change by action of the Board of Regents or the Texas State Legislature.

General Use Fee

The general use fee is assessed to support University debt service and other University functions that are not supported by state funding. Approximately 70% of this fee is used to finance debt service. Other items supported by this fee include the post office, print shop, supply center, cashiering, and other institutional support functions. The current rate is \$12 per hour with a maximum of \$180.

Student Service Fee

The student service fee supports student activities such as athletics, recreational sports, the University Press, the Health Center and other student services. The current rate is \$15 per hour with a maximum of \$138.

Setzer Student Center Fee

This fee supports the Setzer Student Center and its programs. The current rate is \$30 per long semester and \$15 per summer session.

Course Fees

Various courses have additional fees associated with them. Students should always check with the departments offering the class to see if additional fees will be assessed. What follows is a summary of some fees associated with some classes.

ART	
Art classes (per class)	\$0-\$50
ARTS AND SCIENCES	
Biology Course Fee (per lab course)	\$15
Chemistry Course Fee for chemical waste disposal (per lab course)	\$12
Foreign Languages Course Fee (per lab course)	\$6
Geology Course Fee (per semester credit hour lab course)	\$4
Nursing Program Course Fee (per semester)	\$125

Nursing Program Application Fee	\$25
Physics Course Fee (per lab course)	\$10
Other Arts and Sciences courses (per lab course)	\$2-\$4
DEVELOPMENTAL STUDIES	
Developmental classes (per course)	\$70
ENGINEERING	
Fees on some ChE, CE, CS, EE, IE, MTH, ME, EGR courses	\$70 (max \$140)
FINE ARTS AND COMMUNICATION	
Applied Music (per semester hour)	\$50 (max \$150)
HEALTH, KINESIOLOGY AND DANCE	
PEGA classes	\$0-\$20

Computer Use Fee

This fee primarily supports both the administrative mainframe computer and the academic mainframe computer. The current rate is \$3 per hour with a maximum of \$30.

Library Use Fee

This fee is used to support the library. As every course (including field center courses) are given the mandate to use the library, all students are charged this fee. The current rate is \$3 per hour with a maximum of \$30.

Private Lessons in Voice and Instrumental Music

Graduate applied music courses (per semester hour) \$18.00

Late Registration Fee

A charge of \$10 is made for late registration or for paying after the start of the semester (not including the second or third payments under the installment plan).

Parking Fee

Each student who pays the necessary fee is issued a card that permits parking on the campus. This card is numbered and is to be displayed as instructed in official parking and traffic regulations, which are issued when automobiles are registered. Strict observance of traffic and parking regulations is necessary for the safe, orderly flow of vehicles in the campus area.

Charges for parking on campus are made at registration. Automobile registration fees are as follows: Fall Semester, \$32; Spring Semester, \$22; Summer, \$12. Only one registration is required during an academic year, and a student's parking fee is honored until the end of Summer Session II.

Property Deposit

Each student will be required to pay a \$10 property deposit. Any unused portion of the \$10 will be refunded upon request to the Cashiers' Office after the student graduates or withdraws from the University. If a student attends the university for more than four years, this fee will be charged again.

Health and Accident Insurance

Health and accident insurance coverage is available at registration for students carrying nine or more semester hours. This or similar insurance is required of all international students. Additional information may be obtained from the Student Affairs Office.

Miscellaneous Fees

Microfilming of abstract and binding of first two copies of thesis	\$40.00
Microfilming of abstract and binding of first two copies of field study or dissertation	50.00
Thesis, field study, or dissertation binding (each copy after the first two)	13.65
Diploma only (with tax)	16.78
Diploma, cap, and gown – Master's (with tax)	50.23
Diploma, cap, and gown – Doctor's (with tax)	54.94
Copyrighting	35.00
Transcript Fee	5.00
Photo Identification	5.00

Returned Check Fees

Checks written in payment of registration fees and returned to the University due to insufficient funds will result in a \$15 check charge plus a \$10 late registration fee. Obligations paid by an insufficient funds check are considered delinquent. Students who write insufficient funds checks will be placed on a "cash only" basis.

Fine and Breakage Loss

All library fines, charges for breakage or loss of equipment or other charges must be paid before a transcript of credit or a permit to re-enter the University will be issued.

Matriculation Fee

A matriculation fee of \$15 will be incurred by students who withdraw prior to the first day of class. This \$15 fee will be deducted from refunds.

Housing

The student housing program at Lamar is designed to supplement the academic program by providing opportunities for social and intellectual development and recreation in a pleasant living environment. The University recently completed a multi-million dollar renovation program, making its residence halls among the most modern in Texas. A variety of living styles is available and includes modern furniture, semi-private rooms, carpet, central heating and air conditioning and various color schemes in the dormitories. Apartment accommodations in newly remodeled buildings also are available.

Students who do not feel the residence hall program meets their personal needs may elect to find living accommodations off campus.

Questions concerning the housing system, its policies, room and board rates, should be directed to the Student Housing Office, Lamar University, Box 10041, Beaumont, Texas 77710.



The Mary and John Gray Library, the centerpiece of the Lamar University campus, provides access to more than 900,000 volumes in this eight-story building.

Academic Information

Course Numbering

Semesters of a course are numbered separately and each number contains three or more figures. Master's level courses are numbered 400G and 500. Doctoral level courses are numbered 500D and 600. Students who receive graduate credit for 400 (also 400G) level courses are expected to complete extra assignments in the courses over and above what is required for undergraduate credit.

The second figure indicates the number of semester hours credit. The third figure or figures indicates the order in which the course normally is taken. The letter "A" or "B" following course numbers indicates partial credit in each course; full credit for such numbered courses will be granted only when the series has been completed.

In this bulletin, each course title will be followed by three digits separated by colons such as (3:3:1). This code provides the following information. The first number is the semester hours of credit for the course. The second number is the class hours of lecture, recitation or seminar meetings per week. The third number is the required laboratory hours per week. The letter "A" indicates that the hours are arranged, usually with the instructor of the course.

Changing Schedules

All section changes, adds and drops must be approved by the department chair of the student's major field. All such changes are initiated by the completion of the proper form available in the department chair's office. Usually, a course may not be added after the first two days of a regular or summer session.

Dropping Courses

After consultation with their advisor and/or department chair, students may drop a course and receive a grade of "Q" during the first six weeks (two weeks in the summer session) of the semester. For drops after this penalty-free period, grades are recorded as "Q" or "F" indicating that the student was passing or failing at the time of the drop. A grade of "Q" may not be assigned unless an official drop has been processed through the Office of Records. A student may not drop a course within 15 class days of the beginning of the final examinations or five class days before the end of a summer term.

Students should check published schedule for specific dates. A written petition to the Dean of the College in which the course is offered is required of students wishing to drop after the official drop date.

Withdrawal from the University

Students wishing to withdraw during a regular semester or summer term should fill out a Withdrawal Petition in triplicate in the records office. Students must clear all financial obligations, and return all uniforms, books, laboratory equipment and other materials to the point of original issue. However, if the student is unable at the time of withdrawal to clear financial obligations to the University and files with the Office of Records an affidavit of inability to pay, the student will be permitted to withdraw with the acknowledgement that transcripts will be withheld and re-entry to Lamar University as a student will not be permitted until all financial obligations are cleared. Copies of the withdrawal form signed by the department chair and the director of Library Services are presented to the Office of Records by the student.

The Finance Office, on application before the end of the regular semester or summer session, will return such fees as are returnable according to the schedule shown under the "Fees" section of the bulletin. If a withdrawal is made before the end of the sixth week (second week of a summer term) or if the student is passing at the time of withdrawal after the sixth week, a grade of "W" is issued for each course affected. A grade of "F" is issued for all courses not being passed at the time of withdrawal after the penalty-free period.

A student may not withdraw within 15 class days of the beginning of final examinations during a regular semester or five class days before the end of a summer term. A student who leaves without withdrawing officially will receive a grade of "F" in all courses and forfeit all returnable fees. Students should check the published schedule for specific dates. Students wishing to withdraw after the official withdrawal date may review the issue with the Dean of the student's major.

Enforced Withdrawal Due to Illness

The Director of the Health Center and the Vice President for Student Affairs, on the advice of competent medical personnel, may require withdrawal of or deny admission to a student for health reasons (mental or physical).

Academic Records

Academic records are in the permanent custody of the Records Office. Transcripts of academic records may be secured by an individual personally or will be released on the student's written authorization.

Students who owe debts to the University may have their official transcripts withheld until the debt is paid.

Chapter 675, Acts of the 61st Legislature, 1969 Regular Session, provides that "no person may buy, sell, create, duplicate, alter, give or obtain a diploma, certificate, academic record, certificate of enrollment or other instrument which purports to signify merit or achievement conferred by an institution of education in this state with the intent to use fraudulently such document or to allow the fraudulent use of such document."

"A person who violates this Act or who aids another in violating this Act is guilty of a misdemeanor and upon conviction, is punishable by a fine of not more than \$1,000 and/or confinement in the county jail for a period not to exceed one year."

Educational Records and Student Rights

The following information concerning student records maintained by Lamar University is published in compliance with the Family Education Rights and Privacy Act of 1974, PL 93-380.

Access to educational records directly related to a student will be granted to him or her unless the type of record is exempted from the provision of the law.

The types, locations and names of custodians of educational records maintained by the University are available from the Dean of Records and Registrar.

Access to records by persons other than the student will be limited to those persons and agencies specified in the statute. Records will be maintained of persons granted such access and the legitimate interest in each case.

The release of information to the public without the consent of the student will be limited to the categories of information which have been designated by the University as directory information and which will be routinely released. The student may request that any or all of this information be withheld from the public by making written request to the Dean of Records and Registrar. The request must be made by the last official day to register for a given session and applies to that session only. Directory information includes name, current and permanent address, telephone listing, date and place of birth, marital status, country of citizenship, major and minor, semester hours load, classification, eligibility for and participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, with dates, and the last educational agency or institution attended.

A student has the right to challenge records and information directly related to him or her if they are considered to be inaccurate, misleading or otherwise inappropriate. Issues may be resolved either through an informal hearing with the official immediately responsible or by requesting a formal hearing. The procedure to be followed in a formal hearing is available in the Office of Records.

The right of parental access to student records may be established by either of two methods; first, by the student filing a written consent statement or, second, by the parent validating the student's dependency as defined by IRS.

Summons

An official summons takes precedence over other university activities of the student and should be answered promptly on the day and hour designated.

Student Conduct

In order to meet its educational objectives, an institution of higher learning must expect rational, mature behavior from its constituency. To accept anything less is to invite the destruction of not only academic freedom but the system of higher education itself.

Disciplinary procedures, specific University rules and regulations and statements of student rights and responsibilities are published each year in the *Student Handbook*. Copies of the *Student Handbook* are available in the office of the Dean of Students.

Falsification of Records

A student who makes a false statement to any university official or office or on any official form submitted to the University is subject to immediate dismissal.

Student Debts

The University is not responsible for debts contracted by individual students or student organizations and will not act as a collection agency for organizations, firms or individuals to who students may owe bills.

Students and student organizations are expected to honor contractual obligations promptly.

Penalty for failure to clear up these obligations may be (a) no readmission, (b) withholding of grades and transcripts, (c) withholding of degree.

Parking

At registration, each student who pays the necessary fee is issued a permit which allows parking on the campus. This permit is numbered and is to be attached to the back of the rear-view mirror of the car.

Change of Address or Name

Students are responsible for all communications addressed to them at the address on file in the Office of Student Development, in the Office of the College of Graduate Studies and in the Office of Records. Any student who moves during a semester must immediately register the change of address in the above offices. Change of address forms are available in the Office of Records.

Change of name due to marriage, or correction of name because of spelling errors, may be made by completing a name change card at the Office of Records. All name changes must be accompanied by a copy of the legal document making the name change official. This document will be kept on file in the student's confidential folder.

Class Attendance

Regular class attendance is important to the attainment of the educational objectives of the University. Especially in lower division courses and in large classes at any level, the instructor should keep attendance records and should formulate an attendance policy consistent with departmental policies but suited to the needs of the particular course. The instructor's policy is to be explained in detail to the class at the beginning of the semester.

Policy on Student Absences on Religious Holy Days

In accordance with the Texas Education code 51.911, a student who is absent from classes in observance of a religious holy day will be permitted to take an examination or complete an assignment provided he/she notifies his/her instructor within 15 days of the beginning of the semester. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code.

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Notifications of planned absences must be in writing and must be delivered by the student either (a) personally to the instructor of each class, with receipt of the notification acknowledged and dated by the instructor, or (b) by certified mail, return receipt requested, addressed to the instructor of each class. A form, *Notification of Planned Absence for Religious Holy Days*, may be obtained from the Office of Records and the Registrar, Wimberly Building, for the purpose of notification. The completed form must be delivered by the student to the instructor of each class affected by the absence. Upon review of the notification form, instructors will sign and date the receipt of the notice, retaining a copy for the instructor and returning one copy to the student.

Instructors may refer any questions regarding the qualification of the absence to the Associate Vice President and Dean of Students. Students may be required to present to the Associate Vice President and Dean of Students a written statement documenting that such absence qualifies under the terms of a religious holy day.

College of Graduate Studies

History

The College of Graduate Studies was instituted in Fall 1960 with the offering of the Master of Arts degree in the fields of history and English.

In 1962, master's degrees were begun in mathematics, engineering and elementary education; in 1965, in business administration, chemistry, special education and secondary education; in 1968, in health and physical education, political science, speech, and guidance and counseling; in 1969, in biology, and in 1970, in educational supervision. Also in 1970, a doctor's degree in engineering was authorized. In 1972, a master's degree in school administration was approved. Master's degrees in public administration and in psychology were authorized in 1974. In 1975, master's degrees in music, music education and home economics were initiated. In 1981 the Master of Science in Deaf Education was approved and the Master of Engineering Management degree was begun in 1983. A Master of Science in Computer Science was added in 1984. A Doctor of Education in Deaf Education was approved beginning in 1993.

Objectives

The objectives of the College of Graduate Studies are as follows:

1. Advancement of knowledge through research.
2. Intensification within a student's chosen field of specialization and allied areas.
3. Development of the student's skill in the methodology of research.
4. Promotion of the power of independent thought by making students responsible for their own scholarship.

Degrees Offered

Master of Arts

English, History, Visual Art

Master of Business Administration

General Emphasis, Accounting Concentration

Master of Education

Elementary Education, Counseling and Development, Secondary Education, Special Education, Supervision, Administration

Master of Engineering

Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering

Master of Engineering Management

Master of Engineering Science

Chemical Engineering, Civil Engineering, Electrical Engineering, Industrial Engineering, Mechanical Engineering

Master of Music

Master of Music Education

Master of Public Administration

Master of Science

Audiology/Speech-Language Pathology, Biology, Chemistry, Computer Science, Deaf Studies/Habilitation, Environmental Engineering, Environmental Studies,

Family and Consumer Sciences, Mathematics,
Psychology, Theatre

Doctor of Education in Deaf Education

Doctor of Engineering

Chemical Engineering, Civil Engineering, Electrical Engineering,
Industrial Engineering, Mechanical Engineering

Regulations

Student Responsibility

It is the responsibility of each student to know the regulations of the Graduate College and the major department, to enroll in the appropriate course work to complete the degree plan, and to maintain the standards of the University, the College of Graduate Studies, and specific departments and programs.

Enrollment

Admission to Graduate Programs

All students seeking admission to a graduate degree program must first meet the minimum standards of the College of Graduate Studies. Applicants must also have the approval of the department in which the degree program is offered. The admission standards of departments may exceed those of the College of Graduate Studies.

Applications for admission to graduate programs are processed by the Graduate Admissions Coordinator. The Graduate Admissions Coordinator sends to graduate programs only those applications which meet the minimum standards of the College of Graduate Studies. The graduate departments then select those to be recommended to the Graduate Dean for admission. **NOTE: Meeting the admission standards of the Graduate College does not imply admission to a particular degree program.** The Graduate Dean notifies the Graduate Admissions Coordinator of admission decisions and the Coordinator provides written notification of admission status to the applicants. Statements by other university officers concerning the applicant's admissibility are not valid until confirmed by the Graduate Dean.

Admission to any degree program is valid for one year from the admission date. The applicant who does not enroll during that period will be required to resubmit all application materials and meet the admission standards in force at the time of the second application.

Graduate students wishing to change from one major field to another must make application to the Office of the Graduate Dean and must meet all specific program admission requirements for the new major.

1. **Application Deadlines:** Domestic students (U.S. citizens and permanent residents) must submit all application materials at least 30 days before Fall, Spring, or Summer registration. Deadlines for international students are May 15 for Fall semester, October 1 for Spring, and February 15 for Summer terms.
2. **Application Submission by Domestic Students (U.S. citizens or permanent residents):** Applicants for admission to the College of Graduate Studies must submit the following to the Graduate Admissions Coordinator at least 30 days before registration:

- A. Completed Application Form**
- B. Transcripts.** Submit an official transcript from each college or university attended. All transcripts submitted to Lamar University become the property of the University and are not returnable.
- C. GRE and GMAT Test Scores.** With two exceptions, all prospective graduate students are required to submit scores on the Graduate Records Examination (GRE). Applicants should have the Educational Testing Service, which administers the GRE, send test scores directly to Lamar University. The two exceptions to the GRE requirement are applicants for the Master of Business Administration (MBA) and deaf applicants. MBA applicants are not required to take the GRE, but *must* submit scores on the Graduate Management Admission Test, GMAT. See the College of Business section of this *Bulletin* for specific requirements. Deaf applicants may substitute performance intelligence and reading ability test scores for the GRE. See the College of Fine Arts and Communication section of this *Bulletin* for details on admission of deaf applicants. **GRE and GMAT scores more than five years old will be accepted only with permission of the Graduate Dean.**
- 3. Admission Standards for Domestic Students (U.S. citizens and permanent residents):**
- A. Undergraduate Degree.** A prospective student must have a bachelor's degree from an institution approved by a recognized accrediting agency.
- B. GRE Scores.** All applicants, except for deaf students and those seeking admission to the MBA program, must meet **one** of the following GRE criteria:
1. A minimum combined score of 950 on the Verbal plus Quantitative sections of the GRE.
 2. A minimum combined score of 900 on the Verbal plus Quantitative sections of the GRE with a minimum of 350 on the Verbal section.
 3. Minimum scores of 400 on the Verbal section and 400 on the Quantitative section of the GRE with a minimum total of 900 on these two sections.
- C. GMAT Scores.** Admission to the Master of Business Administration (MBA) program is based in part on a formula which considers both the undergraduate GPA and the GMAT score. See the College of Business section of this catalog for details.
- D. Undergraduate Grade Point Average.** Except in the College of Business, all applicants must have a 2.75 grade point average on the last 60 semester hours of work, or 2.50 on all undergraduate work. The grade point average is calculated by dividing the total number of grade points earned by the total number of semester hours attempted ("A" equals 4 grade points, "B" equals 3, "C" equals 2, "D" equals 1, and "F" equals 0). The College of Business also considers the undergraduate grade point average in the admissions process, but in a somewhat different manner. See the College of Business section of this catalog for details.
- E. Undergraduate Work in Intended Major Field, Prerequisites and Deficiencies.** The applicant for graduate study ordinarily must have completed no fewer than 24 semester hours of undergraduate work in the intended major field, 12 of which must be at the junior and/or senior level. Applicants who do not meet this requirement may be required to make up such deficiencies as prescribed by the graduate major. A GPA of 3.0 for assigned deficiency/leveling courses must be maintained and grades below "C" will not be

accepted. Departments which wish to do so may establish more stringent requirements. MBA students with deficiencies will be required to complete first year MBA courses as determined by the College of Business with a grade of "C" or better and an overall GPA of "B" or better in all course work taken.

4. **Admission Procedures and Standards for International Students.** International students are required to follow the procedures and meet the standards for domestic students as stated above. Additional requirements for international students include the following:
 - A. **Transcripts.** International students must submit official certified transcripts from all colleges and universities attended. If the transcripts are not in English, the student must provide certified translations.
 - B. **TOEFL score.** Most international students whose first language is not English must take the Test of English as a Foreign Language (TOEFL) and score better than 525. Lamar University must receive the official TOEFL scores before admission can be granted. For information about testing dates and places, write to TOEFL, PO Box 899, Princeton, NJ 08540, USA. The TOEFL is not required of those international students who have received an undergraduate or graduate degree from a university where English is the language of instruction (e.g., universities in the United States, Canada, and England). As part of the orientation process, international students with relatively low but passing TOEFL scores will be required to take one or more additional English as a second language (ESL) proficiency examinations and may be required to participate in ESL coursework as part of their graduation requirements.
 - C. **Proof of Financial Resources.** International students must prove that they have the financial resources to attend Lamar University-Beaumont. As part of the application process, international students must submit an original Confirmation of Financial Resources form which asks for personal, family, and/or sponsor financial information and a bank verification of financial holdings. All international students are required to have health and accident insurance for themselves and all their dependent family members in the United States. Insurance may be purchased at the University during the registration period.
 - D. Proficiency in spoken English may be required by some graduate programs.
5. **Admission Procedures and Standards for Doctoral Degrees.** Prospective Doctor of Engineering (D.E.) students must send a letter to the Dean, College of Engineering, Box 10057 Lamar University, Beaumont, TX, 77710. The letter should give information on the applicant's engineering experience, current employment and major research interests. For details on GPA, GRE, TOEFL and background requirements, see the College of Engineering section of this catalog.

Prospective Doctor of Education in Deaf Education (Ed.D.) students must send a letter to the Chair, Department of Communication Disorders (Speech and Hearing), Box 10076 Lamar University, Beaumont, TX 77710. The letter should give information on the applicant's deaf education experience, training, employment history, current employment, and major research interests. Deaf applicants are encouraged and experience as a teacher of the deaf is required. For details on GPA, GRE, TOEFL and background/experience requirements, see the College of Fine Arts and Communication section of this catalog.
6. **Readmission of Former Graduate Students.** A former graduate student who has not maintained continuous enrollment for two semesters (summers excluded), but who is academically eligible to continue in the graduate degree program where he or she was most recently enrolled, may be permitted to return. The procedures are dictated by the period of absence from enrollment as follows:

1. **Less Than Two Years.** The student simply notifies the Graduate School and the program coordinator of his or her plans to return.
2. **Two to Four Years.** A new application must be submitted and endorsed by the program coordinator and the Graduate School. The application must show any intervening graduate work, and appropriate official transcripts of the work may be required by the Graduate School. The applicable admission standards are those that were in effect when the student originally enrolled.
3. **Four or More Years.** The student is considered a new applicant and new supporting materials are required. The applicable standards are those in effect when the student applies for readmission. Coursework more than six years old may not be counted toward a graduate degree.

Appeal of Admission Denial

Prospective students who have been denied admission to the College of Graduate Studies have the right of appeal through the Graduate Appeals Committee. The Committee meets in October, in March, and once in the summer unless otherwise indicated. The Committee considers appeals on an individual basis and makes recommendations to the graduate dean. Contact the Office of Graduate Studies (219 Wimberly Building) for complete details on the appeals process.

Admission for Nondegree Students Post Baccalaureate (PB)

1. **Definition.** The Post Baccalaureate (PB) classification carries undergraduate status, does not culminate in a graduate degree, and should not be considered as a means to enter graduate school. The PB admission category is designed primarily for students who do not intend to earn a graduate degree but wish to enroll in graduate courses. The PB classification may be used by students who are seeking teaching certificates, but it must be understood that PB status does not lead to a master's degree. Except for students classified as Pre Graduate (PG), all students who enroll in graduate courses without meeting admission standards or completing the admission process are given PB status.
2. **Admission.** To receive the PB classification, the applicant must:
 - A. Have received a bachelor's degree
 - B. Submit an application for admission with PB status to the Graduate Admissions Coordinator
 - C. Submit an official transcript from each college previously attended, showing highest degree earned
 - D. Be approved for admission with PB status by the University
3. **Enrolling in Courses as a PB Student.** PB students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PB students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business. PB students who want to enroll in elective undergraduate courses for personal or professional development are advised through the Center for Adult Studies – 106 Montagne Center.
4. **PB Classification and International Students.** International students will not be admitted with PB status.
5. **Application of PB Credits Toward a Graduate Degree.** If a PB student is eventually admitted to the Graduate College, a maximum of six semester hours

earned under PB classification may be applied toward a graduate degree if approved by the department and by the Graduate Dean. In addition to these 6 hours, if a student is admitted to the graduate school during a semester in which the student is taking further graduate hours, those further hours will be counted towards the degree.

6. **Competitive Graduate Scholarships and Assistantships for PB Students.** PB students are not eligible for graduate assistantships and scholarships.

Pre Graduate (PG)

1. **Definition:** The PG admissions category is designed primarily for students who intend to enter a graduate program and earn a graduate degree but have not yet met all admission standards and/or submitted all application materials. The Pre Graduate (PG) classification carries undergraduate status and does not culminate in a graduate degree unless the student is eventually admitted to graduate school. The PG status allows the prospective graduate student to enroll in a limited number of graduate courses while completing the application and acceptance process.
2. **Admission:** To receive the PG classification, the applicant must:
 - A. Have received a bachelor's degree.
 - B. Submit an application for regular admission to the Lamar University College of Graduate Studies **and** a PG application form to the Graduate Admissions Office.
 - C. Be approved for admission with PG status by the University.
3. **Enrolling in Courses as a PG Student:** PG students are not permitted to enroll in graduate courses without the prior consent of the chair of the department offering the course/s desired. PG students are not permitted to enroll in graduate business courses without the prior consent of the Associate Dean of the College of Business.
4. **PG Classification and International Students:** International students will not be admitted with PG status.
5. **Application of PG Credits Toward a Graduate Degree:** If a PG student is eventually admitted to the College of Graduate Studies and to a graduate program, a maximum of six semester hours earned under PG classification plus current enrollment may be applied toward a graduate degree if approved by the department and by the Dean of the College of Graduate Studies.
6. **Competitive Graduate Scholarships and Assistantships for PG Students:** PG students are not eligible for graduate assistantships, fellowships, or scholarships.

Academic Policies of the College of Graduate Studies

All graduate students are expected to be familiar with the policies and regulations of the College of Graduate Studies.

1. **Academic Year.** The University divides the academic year into two long semesters (Fall and Spring) and two summer terms of 6 weeks each.
2. **Time Limit for Degree Completion.** All course work applied toward a given degree, except for doctoral degrees, must be completed within a period of six years. This time limit applies to all work at the graduate level, including work transferred from another institution. Time spent in active military service is not included in the six-year limit.
3. **Maximum Semester Course Load.** The maximum course load for graduate students during Spring and Fall semesters is 15 hours per term. The maximum course load for graduate students for any one summer term is 6 semester hours,

- or 7 hours if a lab is taken. These maximums apply even when the graduate student is enrolled in a combination of graduate and undergraduate courses.
4. **Definitions of Full and Part-Time.** A full-time graduate student is defined as a student taking at least nine semester hours of graduate work during Fall or Spring semesters, or both 669A and 669B (thesis) during the same semester, or enrolled in Egr. 662 (doctoral field study). During their final semester, students enrolled in thesis 669B may be considered full-time with 6 semester hours. Students taking less than 9 semester hours of graduate work during a semester are considered part-time. In the summer, full-time is 6 hours per term and half-time is 3 hours per term. In the summer, full-time is 6 hours per term and half-time is 3-hours per term. Full-time status is required for fellowships, scholarships, and teaching/research assistantships.
 5. **Permission for an Undergraduate Student to Enroll in Graduate Courses, Reservation of Work by Undergraduates for Graduate Credit.** An undergraduate student who is within 12 semester hours of graduation may take a maximum of six semester hours of graduate courses which may be applied toward a master's degree. Both the chair of the intended graduate program and the graduate dean must approve, and the total academic load may not exceed 15 semester hours. The G-11 form, available in the Graduate Office (219 Wimberly) and in departmental offices, is used to obtain permission.
 6. **Transfer of Graduate Credits to Lamar University-Beaumont.** With the approval of the chair of the major department and the graduate dean, a student may transfer up to six semester hours of graduate work completed at another regionally-accredited institution and these transferred credits may be applied toward a graduate degree at LU-B. Only courses with grades of "A", "B" or "S" (satisfactory) which were accepted as graduate credit at the institution where the work was taken may be considered for graduate transfer. Transferred credits are not considered in the computation of the graduate grade-point average at Lamar University-Beaumont.
 7. **Application of Institute Hours Toward a Degree.** A maximum of six semester hours of work done in institutes may be approved for graduate credit toward a degree. Institutes are defined as graduate courses of less than three weeks duration.
 8. **Application of Credits from One Master's Degree Toward a Second Degree.** A maximum of six semester hours taken for one master's degree may be counted toward a second master's degree with the approval of the department in which the second degree is sought.
 9. **Use of Advanced Undergraduate Courses Toward a Graduate Degree.** With approval, senior-level courses (those numbered in the 400s) may be used toward a graduate degree if the student has been admitted to the College of Graduate Studies prior to taking such courses and if course content, requirements, and grading standards are augmented by the professor such that graduate expectations are met. Approval is obtained by filing a G-10 Form (Use of 400-Level Course for Graduate Credit) with the Graduate Office before the 12th class day of the semester in which the course is taken.
 10. **Correspondence Credit and Credit by Examination.** Courses taken by correspondence are not accepted for graduate credit. Credit by examination is not accepted for credit toward graduate degrees.
 11. **Course Duplication, Repeating a Course.** With approval of the Chair of the major department, a student may enroll for a course a second or subsequent time and

- have it counted as part of the semester's load. If a course is repeated, the last grade recorded will be considered the official grade, but the original grade remains on the student's record as a course taken. A repeated course will be included in the student's cumulative record and in the computation of the GPA. Independent study/special topics courses may have the same course number but are not considered to be the same course if the topics differ. If a student earns a D or F in a course required for his/her graduate degree, the course must be repeated and a passing grade of A, B, or C must be earned.
12. **Change of Major.** Except in the College of Business, changes of major must be approved by the chair and/or the graduate advisor in the new graduate program and by the Graduate Dean. In the College of Business, changes must be approved by the Associate Dean and by the Dean of the College of Graduate Studies. New international students may begin the process of changing majors during their first semester but may not actually make the change until their second term. Obtain forms for changing majors (G-16) at the Graduate Office (219 Wimberly).
 13. **Enforced Withdrawal or Course Drop.** A graduate student may be required to drop a course or courses or withdraw from the University temporarily or permanently if the student's academic work is below the standards of the College of Graduate Studies (see discussion of probation/suspension below), or if the student is found (through due process) to have engaged in academic dishonesty or misconduct.
 14. **Academic Dishonesty, Misconduct, Discipline Code.** Student conduct regulations, as found in the Lamar University-Beaumont *Student Handbook*, apply to all graduate students. These regulations include policies relating to academic dishonesty, plagiarism, University disciplinary code, and student rights and responsibilities. It is the responsibility of all graduate students to read the *Student Handbook* and to abide by all University regulations.
 15. **Grading System.** The grading system for graduate students is "A" (superior), "B" (good), "C" (marginal), "D" (poor), "F" (fail), "I" (incomplete), "S" (satisfactory), "U" (unsatisfactory), Drop, and Withdrawal. Credits applicable to graduate degrees are given only for the grades A, B, C, and S. Although C grades earned at Lamar University-Beaumont may be counted toward the requirements for a graduate degree, C grades are not considered acceptable graduate-level performance. Courses in which a student earns only a D or F may not be counted toward a graduate degree, although such grades are calculated in determining the grade-point average. Grades of C, D or F must be compensated for by the necessary hours of A if the student is to have the 3.0 grade-point average required before awarding the degree. In computing grade-point averages, an "A" is valued at four grade points, a "B" three, a "C" two, a "D" one, and an "F" zero. An overall grade point average (GPA) of "B" (3.0) on all graduate work attempted is required for graduation. Thesis grades are not included in the computation of grade point averages. Incomplete work that is not finished during the next long semester (Spring or Fall) will be credited with an "F". With compelling justification, the graduate dean may grant an extension of the time limit for the completion of incomplete work.
 16. **Additional Departmental GPA Requirements.** A department or graduate program may impose GPA standards for its majors which exceed those of the Graduate College when approved by the Dean of the academic college.
 17. **Admission of Faculty to Graduate Degree Programs.** Lamar University-Beaumont faculty will not be permitted to work toward a graduate degree within their own department at Lamar University-Beaumont. To pursue a graduate degree in another department, faculty must have the approval of the Graduate Dean.

18. **English Proficiency Required of International Students for Graduation.** International students whose first language was not English are required to pass the Michigan Test before they may be admitted to candidacy for a graduate degree. The Michigan is not used as an admissions requirement to the Graduate College and is taken after the student is admitted and arrives on the Beaumont campus. International students who do not pass the Michigan Test are required to enroll in an English as a Second Language (ESL) course until they pass the test.
19. **Rule Changes.** The University reserves the right to change any of its rules, regulations or course requirements without notice.
20. **Waiver of Regulations.** Graduate students have the right to file a petition for exemption from any academic regulation of the Graduate College. Petitions for exemption are considered by the Graduate Appeals Committee, which makes recommendations to the Graduate Dean. Decisions of the Graduate Dean may be appealed through administrative channels (i.e., to the Executive Vice President for Academic and Student Affairs, then to the University President, the Chancellor, and, finally, to the Board of Regents).
21. **Open Records Policy.** Student records, which generally include information concerning the student and the student's individual relationship to the educational institution, are available on request to Lamar University-Beaumont personnel who have an educational interest in the records. Individual records are also accessible to the student in question, the student's parent or legal guardian until the student reaches the age of 18, and thereafter if the student is a dependent of the parent or legal guardian. Without written consent of the student, records are not released except as noted above.

Quality of Work Required, Probation/Suspension Regulations

The graduate student must maintain a 3.0 grade point average on all courses that receive graduate credit, whether or not they are to be applied toward a graduate degree. Leveling and elective courses taken for graduate credit are included in the computation of the grade point average. A student whose GPA in graduate work falls below 3.0 must make up the deficit, either by repeating courses in which the grades are low, or by completing other graduate courses with grades high enough to bring the GPA up to 3.0.

Graduate students who do not meet the academic standards of the Graduate College will be placed on probation or suspended. Students on probation may enroll in graduate courses but may not apply for graduation. Suspended students may be temporarily or permanently denied permission to enroll in graduate courses. In computing graduate academic status, all graduate work taken during the previous six years except thesis and field study courses apply. Graduate work taken at another institution will be included in the computation of semester hours toward a degree only when that work is applied toward a degree in progress at Lamar University. Transferred credits will not be used in the computation of the graduate grade point average at LU.

1. **Minimum Academic Performance.** Graduate students with grade point averages of 3.0 or better are in good standing. Students with GPAs below 3.0 will be placed on probation or suspended.
2. **Probation.** Students with full graduate admission status who fail to achieve and maintain an overall grade-point average of 3.0 after the completion of 12 semester hours of graduate enrollment will be placed on academic probation. Students on probation who fail to raise their GPA above 3.0 within 12 semester hours of graduate

- work will be suspended. Students on probation may enroll in courses but may not apply for admission to candidacy or for graduation. The probationary status applies whether or not the student receives a letter of notification from the Graduate Office.
3. **Suspension.** A graduate student who has been placed on probation and who fails to raise his/her GPA to at least 3.0 within 12 semester hours of graduate enrollment will be suspended. Suspended students may enroll in summer graduate courses and they may enroll in undergraduate courses during spring, fall, or summer semesters. Undergraduate grades earned while on suspension will not be used in the computation of the graduate GPA. Suspension for the fall semester may be removed if the student raises the graduate GPA to at least 3.0 during summer terms. The first academic suspension shall be for one long semester (fall or spring) and the second suspension will be for two long semesters. The third suspension will be permanent.
 4. **Transfers to New Major Departments by Students on Probation/Suspension.** Suspended students may be admitted to another department only after they have completed their suspension, provided that they meet the admission standards of the new graduate major. Students on probation may transfer to a different graduate program with the approval of the chair of the new program, but will remain on probation until their GPA is 3.0 or better.
 5. **PB Students and Probation/Suspension.** Post baccalaureate students taking graduate course work are not subject to probation or suspension until they have been admitted to the graduate college and a graduate degree program.
 6. **Grades Earned in Deficiency, Leveling, or Background Courses.** A GPA of 3.0 must be maintained for all undergraduate and graduate courses assigned as deficiency; leveling, or background work by the student's major department. Such courses must be repeated if grades of "D" or less are received.
 7. **Additional Departmental Regulations.** A department, with approval from the appropriate academic dean, may require its majors to meet additional standards with regard to probation, suspension, and dismissal. These may be found in the appropriate departmental section of this catalog.

General Degree Requirements

1. Students must earn the number of semester hours of graduate credit specified by their major departments. Specific details may be found in the departmental section of this Bulletin.
2. A minimum of 18 semester hours of the required hours must be courses numbered 500 or above.
3. Any student who writes a thesis must defend it orally before his/her committee. Students who do not write theses must pass a comprehensive examination, which may be oral, written, or a combination of both. Please consult the departmental section of this catalog for specific details.
4. The student must meet the specific requirements as set forth in this catalog for a particular degree program.

Master of Arts

1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work: 18 in the major field, six in thesis, six in an approved minor or six additional hours in the major.
3. Present evidence of a reading knowledge of at least one foreign language. This requirement may be satisfied by examination or by submitting college credit equivalent to that required for the degree of Bachelor of Arts in this institution.

Master of Business Administration

1. Meet all general degree requirements.
2. Complete 30 hours of second year MBA courses specified under College of Business degree requirements if a thesis is written, plus any first year MBA courses required.
3. If a thesis is not written, complete 36 hours of second year MBA courses as specified under College of Business degree requirements, plus any first year MBA courses required.

Master of Education

1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work if a thesis is written or 36 semester hours if a nonthesis program is selected.
3. Meet the specific requirements listed in the College of Education section of this catalog for each degree program.

Master of Engineering

1. Meet all general degree requirements.
2. Complete 36 semester hours of graduate work or complete 30 hours of graduate work plus a three-hour design project.

Master of Engineering Science

1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work, including six semester hours in thesis.
3. Meet the specific requirements listed in the College of Engineering section of this catalog.

Master of Music (Performance)

1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work: 12 hours in the Applied Major, six in Music Literature, six in Music Theory and six in Music Education.
3. Special requirements in addition to the above: a formal public recital and a research paper OR a lecture recital.

Master of Music Education

1. Meet all general degree requirements.
2. Complete 36 semester hours of graduate work: 18 in Music Education, six in Music Literature, six in Music Theory, and six in Thesis.
3. Exceptions: six additional hours in Music Education may be substituted for the Thesis, and six hours in Applied Music may be substituted for Music Education courses.

Master of Public Administration

1. Meet all general degree requirements.
 2. Complete 36 semester hours of graduate work as specified for the degree in the Department of Political Science section of this catalog.
 3. Pass both oral and written comprehensive final examinations.
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Master of Science

1. Meet all general degree requirements.
2. Complete 30 semester hours of graduate work: 15 to 18 semester hours in the major field, six in thesis and six to nine semester hours in the minor field. With the approval of the head of the major department, a student may elect to take all work in the major field.
3. If a thesis is not required, complete 36 hours of approved course work.
4. The graduate degree in psychology requires 36 hours in approved course work and six hours in thesis.
5. Students applying to the Computer Science program must satisfy the depth and breadth requirements as defined by the Graduate Faculty of the Computer Science Department.

Doctor of Education in Deaf Education

1. Obtain credit for all courses required by the student's doctoral committee. The number and extent of these courses will depend upon the student's pre-doctorate educational preparation, previous experience and specialization emphasis during the program. In general, a 30 semester hour core curriculum and a minimum of 30 semester hours of electives/cognates for a total of 60 semester hours.
2. Satisfactorily pass preliminary written and oral examinations after the completion of 18 semester hours.
3. Complete a four consecutive semester (1 calendar year) residency requirement.
4. Obtain admission to candidacy by completing all coursework required for the degree, complete 12 hours of dissertation credit following admission to candidacy, and successfully defend the dissertation prior to graduation.

Doctor of Engineering

1. Obtain credit for all courses required by the student's doctoral committee. The number and extent of these courses will depend upon the student's diagnostic examination, engineering experience and educational objectives. In general a minimum of 30 semester hours of 500 and 600 level course work, excluding Egr 632 and Egr 662, beyond the equivalent of a master's degree will be required.
2. The student shall complete a residency of one year.
3. Satisfactorily pass candidacy examinations as required by the student's doctoral committee.
4. Complete a field study, normally 30 semester hours, involving some technological innovation.
5. Submit and defend a formal engineering report on the field study.

Advisement and Admission to Candidacy

New graduate students do not have an advisory committee and are advised by the chair of the major department or a member of the graduate faculty designated as the initial advisor.

Graduate students are not considered to be candidates for a degree until they have completed a specified set of graduate courses and have proven their academic capability. In some programs, students must pass a qualifying exam before being admitted to candidacy. Students who have been admitted to candidacy are assigned an advisory committee, and the committee establishes a graduation plan.

1. **Initial Advisement.** For the first 12 hours of graduate work, students are advised by the chair of the major department or a member of the graduate faculty who has

- been designated by the chair as the initial advisor. In the College of Business, all graduate students are advised each semester by the Associate Dean.
2. **Timing of Admission to Candidacy.** Admission to the Graduate School does not imply admission to candidacy for a graduate degree. Students seeking a graduate degree must be admitted to candidacy **after** completing a minimum of 12 semester hours of graduate study and **before** their last 9 semester hours.
 3. **Restrictions and Prohibitions to Admission to Candidacy.** Graduate students may not be admitted to candidacy if they a) are on probation, b) are suspended, c) have not removed all undergraduate deficiencies, and/or d) have not completed at least 12 hours of recommended graduate courses. International students required to pass the Michigan Test to indicate English proficiency must do so before they can be admitted to candidacy.
 4. **Procedure for Applying for Admission to Candidacy.** The student is responsible for initiating the process for admission to candidacy by submitting the "Application for Admission to Candidacy for Master's Degree" form (G2) to the chair of the major department. The form is available in the Graduate Office (219 Wimberly Building) and departmental offices. Students should submit the form after completing 12 graduate hours but before enrolling in their final 9 hours.
 5. **Recommendation of Advisory Committee and Degree Plan.** After receiving the "Application for Admission to Candidacy for Master's Degree" form (G2), the departmental chair or the designated graduate advisor submits a recommended degree plan and suggested graduate committee to the Graduate Dean by filing a "Recommendation for Admission to Candidacy for Master's Degree" form (G3). If these recommendations are approved, the student is admitted to candidacy. The graduate dean has the option of appointing additional members to an advisory committee.
 6. **Composition and Roles of the Advisory Committee.** The advisory committee will include a member of the graduate faculty designated as the supervising professor along with at least two other members of the graduate faculty. The committee will assist in monitoring/supervising the remainder of the student's program, including revision of the degree plan; supervision of research; writing and approval of the thesis, field study, or dissertation; and administration and evaluation of the final comprehensive examination.
 7. **Candidacy Examinations.** Departments may require passing examination scores in the admission to candidacy process.

Summary of Graduate School Master's Degree Requirements

Language requirement	M.A. only
Minimum GPA for good standing.....	3.00
Minimum TOEFL (international students)	525
Probation	less than a 3.00 GPA
Suspension	less than a 3.00 GPA for more than 12 hours
Maximum transfer	6 semester hours
Maximum PB credits toward degree	6 semester hours
Minimum thesis credits	6
Time limit for degree	6 years

Maximum age of GRE scores	5 years
Minimum credit hours, most degrees	30 semester hours
Minimum credit hours, second degree	30 semester hours
Maximum registration, long semester	15 semester hours
Maximum registration, summer term	6-7 semester hours
Maximum transfer	6 semester hours
File for candidacy	after 12 hours and before final 9 hours

Doctor of Engineering

A student will be admitted to candidacy for the Doctor of Engineering degree only upon the recommendations of his/her doctoral committee. In general this committee will require the following:

1. Satisfactory progress in all course work.
2. Continuous pursuit of the degree by earning at least three semester hours credit in a two consecutive semester period. Any student who does not do so must apply to the graduate engineering faculty for permission to continue in the program.
3. Prepare a proposal for a field study involving a technological innovation and defend this proposal to a doctoral committee as part of the candidacy examinations.
4. Satisfactorily pass other examinations designed to determine whether the student is ready to do the field study.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Doctor of Education in Deaf Education

A student will be admitted to candidacy for the Doctor of Education in Deaf Education degree only upon the recommendations of his/her doctoral committee. In general, this committee will require the following:

1. Satisfactory progress in all course work.
2. Continuous pursuit of the degree by earning at least three semester hours credit in a two consecutive semester period. Any student who does not do so must apply to the graduate faculty in deaf education for permission to continue in the program.
3. Preparation of a proposal for a research study involving deaf studies/education issues and defend this proposal to a doctoral committee as part of the candidacy examinations.
4. Passing satisfactorily other examinations designed to determine whether the student is ready to do the dissertation.

A student who fails to be admitted to candidacy on the first attempt may take additional courses or otherwise prepare for an additional attempt as may be recommended by the doctoral committee. Any student who does not meet the minimum requirements as established by the student's doctoral committee may be required to withdraw from the doctoral program.

Advisory Committees

Members of a student's advisory committee are appointed by the Graduate Dean upon recommendation by the Chair of the student's major department at the time the student is admitted to candidacy. After admission to candidacy, but before the date of the final examination or the oral defense, the student may request a change in the committee composition with the approval of the student's department chair. If the department Chair does not approve a request for a committee change, the student may request the Graduate Dean to appoint a three member Review Committee. In the event the Review Committee fails to effect an agreement between the student and the original committee, a new committee may be selected for the student by the Graduate Dean, the Dean of the student's academic college and two members of the graduate faculty of the student's academic college chosen by the Graduate Dean. The time period should not exceed 10 class days from the date of receipt by the Graduate Dean of a written request for review and arbitration by the student and the appointment of a new committee, should one be necessary.

Thesis Requirements

A thesis is required for the Master of Science degrees in biology, chemistry, and psychology, and for the Master of Engineering Science degree. It is not available in programs leading to the Master of Public Administration and Master of Music degrees, or the Master of Education degrees in Guidance and Counseling or in School Administration. A thesis is optional in all other degree programs. Students who write theses are expected to follow the procedure below.

1. Register for the departmental thesis course with the approval of the student's graduate advisor. The first registration is for Thesis 669A; all subsequent registrations are for Thesis 669B. All students are expected to register for Thesis 669B until the thesis has been completed. NOTE: No academic credit is given for thesis courses until the thesis has been approved by the major department and accepted by the College of Graduate Studies. At that time, six semester hours credit will be awarded with a grade.
2. Write a thesis under the direction of the supervising professor. The form and style of the thesis must follow the thesis guidelines which are available from the College of Graduate Studies.
3. Submit a single, unbound copy of the thesis in final form to the Dean of the College of Graduate Studies at least 10 days before the oral defense and at least 30 days before the date of graduation.
4. Defend the thesis orally at least 10 days before the date of graduation at a time and place specified by the supervising professor. The defense must be scheduled in the Graduate College at least 10 days before the defense is to be held. The supervising professor will report the results of the defense to the College of Graduate Studies within two working days.
5. Submit three official final copies of the thesis on rag content paper to the Graduate College at least 10 days before graduation. Additional copies may be turned in for binding at the same time if desired or if required by the student's major department. All copies must be signed by the student's supervising professor and committee members, department head, and academic dean.
6. Submit two extra copies of the thesis abstract and a completed University Microfilms form at least 10 days before graduation.
7. Pay all binding and abstract publication fees in the University Bookstore at least 10 days before graduation.

Non-Thesis Requirements

1. All candidates for graduate degrees who do not write theses must pass a comprehensive final examination which must be taken during the last semester of attendance and at least 10 days before the conferral of the degree. The form of this examination is determined by the student's major department, and may be oral, written, or a combination of both. An exception to this rule exists for Audiology/Speech-Language Pathology: those students who pass the ASHA national boards may be exempt from master's oral and/or written comprehensive examinations.
2. A student registers for the comprehensive examination by applying for graduation in the Graduate College. Applications must be filed **before** the deadline established by the Graduate College. Those deadlines are:

For December graduation	First Monday in October
For May graduation	First Monday in March
For August graduation	First Monday of Summer Term I

Specific dates will be found in the calendar at the front of this Bulletin.

3. If all requirements for graduation except the comprehensive examination have been completed, the student may take the examination during a later semester without being enrolled in the College of Graduate Studies. NOTE: International students who want to do practical training must be enrolled in at least one class the semester that the comprehensive examination is taken.
4. All oral examinations must be scheduled in the Office of the Graduate Dean at least 10 days prior to the date of the examination. The Dean may attend or may send a representative to attend.
5. Written comprehensive examinations will be administered in accordance with the following schedule.

Fall Term	First Thursday in November
Spring Term	First Thursday in April

NOTE: Written comprehensive examinations will be given only once during the summer: on the last Monday of the first summer term. If this date conflicts with the July 4 holiday, the examinations will be given on the last Monday in June. For specific dates, please consult the official calendar in the front of this Bulletin or call the Graduate College for details.

6. Failure to pass a comprehensive examination in three attempts will result in a student being permanently suspended from that degree program. The examination may be taken only once each term. Students suspended under this provision may be admitted to another degree program if they meet the required standards and are accepted by the new degree program.

A department may prescribe additional academic requirements for its majors with the approval of the Dean of the College of Graduate Studies.

Graduation Procedure

Students who intend to graduate at the end of a particular semester must apply for graduation in the office of the Graduate Dean on or before the official deadline for application as established by The College of Graduate Studies.

Degree candidates must be present at the commencement exercises unless they have been excused by the Graduate Dean. Written requests to graduate in absentia must be approved by the Graduate Dean for at least four weeks before the scheduled date of graduation.

College of Arts and Sciences

The College of Arts and Sciences offers programs of study leading to the Master of Arts degree in the fields of English, political science and history; the Master of Science degree in the fields of biology and chemistry; and the Master of Public Administration degree. In addition, graduate study is available in geology, physics and sociology as areas of support or specialization in other advanced degree programs.

Persons seeking admission to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy.

Department of Biology

The Department of Biology offers a program of study leading to the Master of Science in biology degree. It is designed to enhance the professional competence of graduates in biology or closely related disciplines who are presently engaged in or planning to enter secondary school or college teaching, or who expect to be employed by private or governmental agencies in biologically oriented fields.

Applicants must 1) have completed a minimum of 24 semester hours in the biological sciences, 2) have completed a minimum of one semester of organic chemistry and one semester of statistics, 3) remove any deficiencies as provided in the section on admission, 4) score a total of 950 (Verbal plus Quantitative Sections) on the Graduate Record Examination, or if V + Q score falls between the Graduate College minimum score and 949, receive a majority vote of the biology graduate faculty, 5) have an undergraduate grade point average of at least 2.5/4.0 overall or on the last 60 hours of undergraduate work.

Degree Requirements

The candidate for the M.S. in biology must meet all the College of Graduate Studies general requirements as listed in this catalog. Additional specific requirements are

1. Submit a written proposal for the thesis. After the thesis proposal is written, pass an oral examination before the biology graduate faculty on the experimental design of the proposed thesis and related disciplines. Note: This requirement should be completed during the first year of enrollment and **must** be completed by the end of the second year of the program.
2. For their professional development, students will enroll in Bio 511 Graduate Seminar each Fall and Spring semester. A maximum of two semesters credit will be counted toward the Master's degree; subsequent enrollments will be for a grade but will not count toward the degree. Exceptions must be approved by the biology graduate faculty.
3. Thirty-three hours of graduate credit which may include a maximum of 16 hours in approved 400 level courses with augmented requirements. All course work will be in biology. Exceptions must be approved by major advisor and by the Chair, Department of Biology.

Graduate Faculty

Assistant Professor Ross S. Anderson
Biology, molecular biology,
and biochemistry

Associate Professor Michael W. Haiduk
Genetics, vertebrate systematics

Professor Richard C. Harrel
Limnology, ecology, invertebrate
zoology

Associate Professor Madelyn D. Hunt
Medical microbiology, epidemiology

Assistant Professor Paul F. Nicoletto
Biology and zoology

Professor Michael E. Warren
Entomology, mosquito biology

Biology Courses

510	Materials and Techniques of Research Survey of laboratory and library research techniques, instrumentation and materials requisite to scientific investigation. Required of all entering graduate students.	1:1:0
511	Graduate Seminar Current topics in biological research. See requirement 3 under Degree Requirements.	1:1:0
540	Ornithology Natural history, taxonomy and ecology of birds. <i>Prerequisite: Bio 440.</i>	4:3:3
541	Animal Behavior An analysis of the development and significance of various behavior patterns in animals from an evolutionary point of view.	4:3:3
542	Toxicology Toxicological principles and responses of the major organ systems. Pesticides, metals, and solvents and their effects on the environment will be considered. <i>Prerequisite: Organic chemistry</i>	4:3:3
543	Ichthyology Natural history, taxonomy and ecology of freshwater and marine fishes. Required field trip.	4:3:3
544	Herpetology Natural history, taxonomy and ecology of amphibians and reptiles. Required field trip.	4:3:3
545	Mammalogy Natural history, taxonomy and ecology of mammals. Required field trip.	4:3:3
546	Marine Invertebrate Zoology Field study and identification of area species; current research. Required field trips. <i>Prerequisite: Bio 346 or 445.</i>	4:3:3
547	Ecology of Polluted Waters Analyses of effects of water pollutants on aquatic ecosystems. <i>Prerequisite: Bio 443.</i>	4:3:3
549	Comparative Physiology Fundamental physiological processes in animals from the phylogenetic viewpoint. <i>Prerequisite: Bio 344, Chm 342.</i>	4:3:3
558	Molecular Genetics Detailed treatment of molecular aspects of nucleic acids and genetic systems of pro-and eucaryotic organisms. Laboratory emphasis on isolation, purification, restriction digests, Southern blotting and recombinant DNA techniques. <i>Prerequisite: genetics, organic chemistry, and/or biochemistry recommended.</i>	5:3:6
5101, 5201, 5301, 5401	Special Topics Research in areas other than thesis. <i>Prerequisite: Approval of graduate advisor. May be repeated when topic changes.</i>	1-4:A:0
6390-6391	Thesis <i>Prerequisite: Approval of graduate advisor.</i>	6:A:0

Department of Chemistry

The Department of Chemistry offers a program of study leading to the Master of Science degree in Chemistry. Those seeking admission to this program must meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies and must have a minimum grade point average of 2.0/4.0 overall or on the last 60 hours of undergraduate work. In addition, the applicant must offer the substantial equivalent of the course in general chemistry, inorganic chemistry, analytical chemistry, organic chemistry and physical chemistry required of undergraduate students in the chemistry curriculum. The applicant also must have completed one year of college physics and mathematics through integral calculus.

Students working toward the graduate degree in chemistry will take a set of four proficiency examinations, one in each of the fields of chemistry; analytical, inorganic, organic and physical. These examinations are taken on entrance and are offered in the fall and again during the beginning of the Spring semester. The results of these examinations are used for orientation and guidance.

Degree Requirements

The candidate for the M.S. degree in Chemistry must meet all the College of Graduate Studies general degree requirements as listed in the catalog. Additional specific degree requirements are as follows:

1. Fifteen to 18 semester hours of course work in Chemistry¹ which must include Chm 531, 533, 535, 537 and at least one 500 level Selected Topics course in Chemistry with a grade point average of "B" (3.0) in these courses.
2. Presentation of a thesis.
3. Six to nine additional semester hours of 400G or 500 level courses in an approved field of study.
4. Competence in computer science.
5. Examination results on the chemistry section of the GRE must be submitted before graduation.

Graduate Faculty

Professor Hugh A. Akers
Biochemistry

Professor David L. Cocke
Analytical chemistry, environmental
chemistry

Assistant Professor John A. Colapret
Organic chemistry

Professor Keith C. Hansen
Organic chemistry

Professor J. Dale Ortego
Inorganic chemistry

Associate Professor Shyam S. Shukla
Analytical chemistry, environmental
chemistry

Chemistry Courses

531	Advanced Analytical <i>Prerequisite: Graduate standing or consent of instructor.</i>	3:3:0
533	Advanced Inorganic <i>Prerequisite: Graduate standing or consent of instructor.</i>	3:3:0
535	Advanced Organic <i>Prerequisite: Graduate standing or consent of instructor.</i>	3:3:0
537	Advanced Physical <i>Prerequisite: Graduate standing or consent of instructor.</i>	3:3:0
539, 569	Graduate Problems in Chemistry May be repeated for credit. Techniques of research under close supervision of instructor; individual consultations; reports. May not be substituted for required courses. <i>Prerequisite: Graduate standing and consent of instructor and department head.</i>	3 or 6:A:0
5101, 5301, 5401, 5501, 5610	Special Topics The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. <i>Prerequisite: Departmental approval.</i>	1-6:1-6:0-6
5331	Selected Topics in Inorganic Chemistry May be repeated for credit when topic varies. Description of course content will appear in schedule of classes. <i>Prerequisite: Chm 535 or consent of instructor.</i>	3:3:0
5352	Modern Synthetic Organic Selected topics in modern synthetic organic chemistry. <i>Prerequisite: Graduate standing.</i>	3:3:0
5371	Selected Topics in Physical Chemistry May be repeated for credit when topic varies. Description of course content will appear in schedule of classes. <i>Prerequisite: Chm 537 or consent of instructor.</i>	3:3:0
6390-6391	Thesis <i>Prerequisite: Approval of graduate advisor.</i>	6:A:0

Department of English and Foreign Languages

The graduate program of the Department of English and Foreign Languages offers opportunity for intensive study of language and literature. Scholarly interests of members of the department include old and middle English, the Renaissance, Shakespeare, eighteenth century studies, English and American romanticism, the Victorian age, modern English and American literature, and comparative literature. In addition to the study of literature through courses organized by genre, period and individual author, the student may explore the history and structure of language and language acquisition and the crafts of both creative and technical writing.

Degree Requirements

The degree of Master of Arts in English requires the completion of 30 semester hours of graduate work: 24 in English (or 18 with an approved six-hour minor), and six in thesis. In general, students are encouraged to emphasize graduate seminars (courses numbered 500 or above) in their graduate coursework, although appropriate 400 level courses, with augmented requirements, may also apply. In the non-thesis alternative, 12 semester hours of coursework may be substituted for the thesis. The creative thesis, as well as the traditional critical thesis, is an option.

All students must have a minimum undergraduate grade point average of 2.5/4.0 overall or on the last 60 hours of undergraduate courses. In addition, international students must score at least 550 on the TOEFL before admission. Students interested in pursuing an M.A. degree in English whose undergraduate major was not English should consult the English department chair.

Professional Certification Requirements (Texas) in English

The plan for the Professional Certificate—Secondary requires the completion of 36 semester hours of graduate work: 18 in English, six in resource areas and 12 in approved teacher education. At least 12 semester hours must be in English courses numbered 500 or above. The courses in the resource areas must be approved by the Chair of the Department of English and Foreign Languages; such approval will be given on the basis of the support they can give to the major and on the specific needs of the graduate student. The 12 semester hours of teacher education must be taken in courses specifically approved for the Professional Certificate-Secondary.

Depending on the student's undergraduate course work, the graduate program in English will ordinarily include English 533, 539, and two courses from 535, 536, 537, 538 or 5311.

Graduate Faculty

Associate Professor Lloyd M. Daigrepoint
American literature before 1900
Professor Marilyn D. Georgas
Renaissance and Victorian literature
Professor R.S. Gwynn
Creative writing and post-modernism
Assistant Professor Gregory Kelley
Romanticism, Critical Theory
Assistant Professor Max Loges
Technical Writing
Assistant Professor Joseph E. Nordgren
Modern British Literature
Professor R. Victoria Price
English as a second language, Modern
American and British literature

Associate Professor Dale G. Priest
English Renaissance, Eighteenth
century
Associate Professor James Sanderson
Creative writing, American literature
Associate Professor Pamela S. Saur
German literature, the drama
Professor Sallye J. Sheppard
Medieval and Renaissance literature
and rhetoric, women's studies
Assistant Professor Stephenie Yearwood
Writing, English education,
seventeenth century

English Courses

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|-----|--|-------|
| 511 | Composition Practicum
Practicum in the teaching of writing. Involves classroom experience, peer discussion and mentor consultation. Graded on S-U basis.
<i>Prerequisite: Graduate teaching fellow standing.</i> | 1:1:0 |
| 533 | Special Topics in Old and Middle English Languages and Literature
Intensive study of the languages necessary for reading literature of the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
<i>Prerequisite: Graduate standing and Eng 430.</i> | 3:3:0 |
| 535 | Special Topics in Renaissance and Seventeenth Century English Literature
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
<i>Prerequisite: Graduate standing.</i> | 3:3:0 |
| 536 | Special Topics in Restoration and Eighteenth Century English Literature
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
<i>Prerequisite: Graduate standing.</i> | 3:3:0 |
| 537 | Special Topics in Nineteenth Century English Literature
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
<i>Prerequisite: Graduate standing.</i> | 3:3:0 |
| 538 | Special Topics in Twentieth Century Literature
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
<i>Prerequisite: Graduate standing.</i> | 3:3:0 |

- 539 Special Topics in American Literature** 3:3:0
An intensive study of an author or related authors selected from the period. Course may be repeated for a maximum of six semester hours credit when the topic varies.
Prerequisite: Graduate standing.
- 5311 Special Topics in Comparative Literature** 3:3:0
Intensive study of an author or authors, genre or period selected from the range of world literature. Emphasis on analysis and literary method. Course may be repeated for a maximum of six semester hours credit when the topic varies.
- 5313 Special Topics in English Instruction** 3:3:0
Intensive study of theory and pedagogy of language or literature for secondary teachers.
- 6390-6391 Thesis** 6:A:0
Prerequisite: Approval of graduate advisor.

Department of Geology

The Department of Geology offers the following graduate courses to be used primarily as a support to other advanced degree programs.

Graduate Faculty

Associate Professor James W. Westgate
Vertebrate paleontology, paleoecology

- 532 Environmental Geology** 3:3:0
The geological aspects of the environment. The environmental significance of man's use of natural resources. Field and laboratory studies of the local environment. Field trip required. Term paper based on laboratory, library, or field studies.
- 534 Fossils and Earth History** 3:3:0
The evolution and history of life as recorded by fossils. Laboratory identification of common fossils. Demonstration of "hands-on" approach to the use of materials that illustrate the fossil record. Field trip required. Term paper based on laboratory, library, or field studies.
- 5201 Institute in Earth Science** 1:1:0
Summer, in-service, or other institutes for earth science teachers patterned after the inquiry-oriented Earth Science Curriculum Project approach to earth science. The course includes laboratory and field investigations in aerospace science, geology, meteorology and oceanography and "hands-on" experience with rocks, minerals, fossils, maps, and other earth science materials and techniques. Field trips required.
- 5301 Institute in Earth Science** 2:2:0
Summer, in-service, or other institutes for earth science teachers. Credit varies with duration. The description of the area of study of each institute will appear on the printed schedule. May be repeated for credit when nature of institute differs sufficiently from those taken previously.

Department of History

It is the purpose of the Department of History to impart a knowledge and understanding of the past to the students enrolled in the University. This objective is based upon the belief that such knowledge and understanding improves the quality of life for individuals and contributes to the welfare of our society. The Department seeks to accomplish this objective through a program of continued study and research by its members and students. Research interests of the Department focus on both American and European history.

Degree Requirements

Applicants for the Master of Arts in History must meet all Graduate College admission requirements. In addition, they must have an undergraduate grade point average of 2.5/4.0 overall OR on the last 60 hours of undergraduate work. Students who do not have a bachelor's degree in history may need to take background courses on the undergraduate level.

Because students in history must be capable of performing research in cultures other than their own, all students must demonstrate a reading knowledge of one classical or modern foreign language before receiving their master's degree. This requirement may be satisfied by completing the 232 course in a language, OR by passing a nationally recognized standardized test, OR by completing a project administered jointly by faculty members in the Departments of History and of English and Foreign Languages.

The Department offers both thesis and non-thesis options. The thesis program requires completion of 30 semester hours; 18 hours must be in 500 level courses. The student must also take six hours in a minor field which should be chosen to support the student's studies in history. With departmental approval, six additional hours in history may be substituted for the minor. The student receives six hours credit for writing and defending a thesis. The thesis option is strongly recommended for those planning graduate study beyond the masters.

The non-thesis option provides a strong foundation in a wide range of historical areas and periods and is designed for those who do not intend to seek a higher degree. Non-thesis students must complete 36 hours in history; 21 hours must be 500 level courses and six hours may be in an approved minor field. With departmental approval, six additional hours in history may be substituted for the minor. After completing their class-work, students must take a comprehensive examination which may be either oral or written as determined by the student and supervising professor.

Graduate Faculty

Professor Adrian N. Anderson
United States history, revolution,
early national
Professor John M. Carroll
United States history, diplomatic, the
South
Associate Professor Ronald H. Fritze
Tudor-Stuart England
Professor Howell H. Gwin, Jr.
European history, ancient, classical,
medieval

Professor John W. Storey
United States history, urban, social
intellectual
Professor Walter A. Sutton
United States history, diplomatic
Professor Ralph A. Wooster
United States history, Civil War, the
South

History Courses

532	Readings in American History Course may be repeated when topic varies. <i>Prerequisite: Graduate standing.</i>	3:3:0
534	Readings in European History Since 1815 Course may be repeated when the topic varies. <i>Prerequisite: Graduate standing.</i>	3:3:0
537	Seminar in United States History Course may be repeated when the topic varies. <i>Prerequisite: Graduate standing.</i>	3:3:0
5311	Seminar in European History Course may be repeated when the topic varies. <i>Prerequisite: Graduate standing.</i>	3:3:0
5312	Directed Readings in History Directed readings to be arranged by student in consultation with faculty member in area of mutual interest. Course may be applied to 500 level course requirement for a maximum of 6 hours in the thesis program and 9 hours in the non-thesis option.	3:A:0
6390-6391	Thesis <i>Prerequisite: Approval of graduate advisor.</i>	6:A:0

Department of Physics

The Department of Physics offers the following graduate courses to provide an area of specialization for the Master of Education degree in Secondary Education and as support to other advanced degree programs. For the M.S. degree in Mathematics, a nine semester-hour minor in Physics is accepted; in addition, the subject of the thesis may be a mathematical problem in physics.

Physics Courses

5101, 5201, 5301, and 5601 Institute in Physics	Designed to provide credit for participation in summer, in-service or other institutes. Credit varies with duration. The description of the area of study of each institute will appear on the printed schedule. May be repeated for credit when nature of institute differs sufficiently from those taken previously.	1-6:1-6:2-4
530 Seminar in Physical Science	Designed for non-science majors. Measurement, light, the solar system and stars, force and motion, work and energy, heat, weather, lightning, electric charge and current, magnetism, batteries, atoms and molecules. Credit in this course may not be applied toward a degree in science, engineering or mathematics.	3:3:0
531 Theoretical Physics	The application of typical mathematical techniques, with emphasis on field and potential concepts.	3:3:0
532 Relativity	Brief introduction to the special and general theory followed by detailed study of a particular topic.	3:3:0
533 Seminar	Selected topics pertaining to the research reported in contemporary publications. Course may be repeated for credit when the topic varies, but only six semester hours credit in this seminar may be applied toward a degree.	3:3:0

Department of Political Science

The Department of Political Science offers a program of study leading to the Master of Public Administration degree. Persons seeking admission must meet the general requirements for admission as outlined in the graduate catalog and must present an undergraduate grade point average of 2.5/4.0 overall or on the last 60 hours of undergraduate work.

Degree Requirements

The degree of Master of Public Administration requires the completion of 36 semester hours of graduate work: 21 in the core curriculum (POLS 535, 5351, 5352, 5353, 5354, 5358, and 5359) and 15 from an approved list of courses. Applicants must have completed the following undergraduate courses or their equivalents: introduction to public administration (three semester hours); urban politics (three semester hours), and statistics for social scientists (three semester hours). Students must pass both written and oral comprehensive final examinations.

Criminal Justice Management Track

The Criminal Justice Management track in the Master of Public Administration (MPA) degree program maintains a strong emphasis on a solid graduate education in Public Administration while introducing advanced training in justice administration. In addition, the student retains the flexibility of taking graduate work in a related field of interest. The degree program prepares students to assume positions of responsibility in the administration of law enforcement and correctional institutions.

Prerequisites include those for the MPA degree plus Criminal Justice 4321 - Responses to Crime. Students must complete 36 hours of graduate work including the following seminars.

Graduate Faculty

Associate Professor David S. Castle
 American Politics, methodology
 Professor Bruce R. Drury
 Comparative politics, Latin American
 politics
 Associate Professor Elbert T. Dubose, Jr.
 Public administration

Professor Glenn H. Utter
 Political philosophy, American
 political thought
 Assistant Professor James M.
 Vanderleeuw
 Urban politics, public policy

Political Science Courses

- | | | |
|------|---|-------|
| 530 | Scope and Methods of Political Science | 3:3:0 |
| | The study in depth of selected topics concerning the theoretical foundations underlying a scientific approach to the study of political phenomena and analytical techniques to be applied to a study of political behavior.
<i>Prerequisite: Graduate standing.</i> | |
| 531 | Seminar in Political Theory | 3:3:0 |
| | Selected issues in political thought with emphasis on the classical thinkers and their relationship to contemporary political, economic and social problems.
<i>Prerequisite: Graduate standing.</i> | |
| 532 | Directed Reading | 3:3:0 |
| | Graduate students may study individually with an instructor in an area of mutual interest to the student and the instructor.
<i>Prerequisite: Graduate standing and approval of Chair, Department of Political Science.</i> | |
| 535 | Seminar in Administrative Theory | 3:3:0 |
| | An examination of major theories dealing with organizations and their characteristics, scope and effect on public administration and executive behavior. Emphasis will be placed on the relationships between theories and supporting empirical research.
<i>Prerequisite: Graduate standing.</i> | |
| 5351 | Seminar in Personnel Administration | 3:3:0 |
| | Personnel theory and practice in the public setting. The basic methods and functions of personnel administration in the context of public organizations, employee motivation, employee relations and collective bargaining will be emphasized.
<i>Prerequisite: Graduate standing.</i> | |
| 5352 | Seminar in Fiscal Administration | 3:3:0 |
| | The study of formulation and administration of government budgeting, including the role of the budget in the policy process, approaches to budget formulation and analysis, the development of PPB approach and other basic concepts and practices in government budget and finance administration.
<i>Prerequisite: Graduate standing.</i> | |
| 5353 | Seminar in Public Policy Formulation | 3:3:0 |
| | The process of policy-making within governmental agencies and within the total political process. Emphasis will be placed on decision-making, public policy analysis and policy implementation.
<i>Prerequisite: Graduate standing.</i> | |
| 5354 | Seminar in Special Studies in Public Administration | 3:3:0 |
| | Analysis of selected problems in public administration: urban and regional planning and management, administrative reorganization, the environment and related problems.
<i>Prerequisite: Graduate standing.</i> | |
| 5358 | Internship | 3:A:0 |
| | Practical administrative experience in a local, state, regional or federal office or agency that is the equivalent of one-half time for one semester, full-time in a summer semester. Examinations and reports on practices and problems in agencies are required. This course may be waived for students already employed in an administrative capacity in a government agency if they elect three additional hours from the approved program courses.
<i>Prerequisite: Graduate standing.</i> | |
| 5359 | Internship | 3:A:0 |
| | Practical administrative experience in a local, state, regional or federal office or agency that is the equivalent of one-half time for one semester, full-time in a summer semester. Examinations and reports on practices and problems in agencies are required. This course may be waived for students already employed in an administrative capacity in a government agency if they elect three additional hours from the approved program courses.
<i>Prerequisite: POL 5358 and graduate standing.</i> | |

- 536 **Seminar in International Relations** 3:3:0
The study of selected problems in international relations. Theoretical, legal and institutional issues as well as specific policies will be examined.
Prerequisite: Graduate standing.
- 537 **Seminar in Comparative Study of Political Systems** 3:3:0
Study of the theory and method of comparative political analysis; systematic examination and explanation of the structure and function of Western and non-Western political systems.
Prerequisite: Graduate standing.

Criminal Justice Management Track Courses

- CJ 531 **Criminal Justice Administration**
Advanced study of the administration of justice. Emphasis on problems and relationships, both within and among components of the criminal justice system and between these components and other human service agencies.
- CJ 532 **Criminal Justice Theory and Policy**
Theoretical sources of current crime control policies; examination of the effectiveness of selected policies and programs; new directions in policy.
- CJ 533 **Criminal Justice Planning and Evaluation**
Formal planning and research methods for criminal justice practitioners. Includes the application of techniques such as systems analysis, cost-benefit analysis, and PERT to problem areas in criminal justice.
Prerequisite: A course in research, and demonstrated ability to use a personal computer.
- CJ 534 **Special Studies in Criminal Justice**
Analysis of selected issues in Criminal Justice administration and theory development. Can be taken for elective credit.

Department of Psychology

The Department of Psychology offers a program of study leading to the Master of Science degree in applied psychology. It is designed to prepare professional personnel for employment in business, industry or community mental health. Students may elect to take their primary coursework in industrial/organizational psychology or in community/counseling psychology. Those seeking admission to this program must meet the general requirements as set forth in the catalog for admission to the College of Graduate Studies and must offer the substantial equivalent of a bachelor's degree in psychology (24 semester hours) including courses in statistics and experimental psychology. The department has flexible admission criteria which will allow the faculty to review applicants individually. However, students with GRE scores less than 1000 (V + Q) are not usually accepted. International students must present a minimum TOEFL score of 600. All students must also have a 2.5/4.0 undergraduate grade point average overall or 2.75/4.0 on the last 60 hours of undergraduate course work. Post Baccalaureate students are not permitted to enroll in psychology graduate courses without special permission from the department chair.

Degree Requirements

The candidate for the Master of Science degree in Psychology must meet all of the College of Graduate Studies general degree requirements. Additional specific degree requirements are as follows:

1. Forty-two semester hours of course work in psychology which must include 23 semester hours in Psychology 530, 531, 5311, 532, 5320, 5323, 535 and two semester hours in Psychology 512. For the Community Psychology Program, an additional 9 semester hours in Psychology 5310, 5312 and 5313 is required. In the Industrial Psychology Program, an additional 6 semester hours is required in Psychology 5321 and 5322.
2. Candidacy examinations devised by the Psychology Department graduate faculty. A student may petition to be administered the candidacy (qualifying)

- examination during the semester in which the appropriate course work listed in No. 1 above is to be completed provided the student is in good academic standing. Dates to sit for the examination will be announced each year. A student must have satisfactorily passed candidacy examinations prior to enrolling in Psychology 5330, 669A, 5310 or 5313.
3. One to three additional semester hours of 400G and/or 500 level courses in an approved field of study.
 4. Practicum: Six semester hours in Psychology 5330 and 5331 for I/O students; three semester hours in Psychology 5330 for community students.
 5. Thesis: Submission of an acceptable thesis and satisfactory performance on a final oral examination with a minimum of six semester hours in Psychology 669.

Departmental Policies

Special attention is called to the following departmental policies:

1. Graduate students are prohibited from providing psychological services except when supervised by a faculty member as part of a course requirement or when regularly employed by a licensed psychologist, an exempt agency as defined by the *Psychologist's Certification and Licensing Act* or a departmental approved nonexempt agency. Students in training are expected to be aware of and abide by the *Psychologist's Certification and Licensing Act* and the *Ethical Principles of Psychologists*. A violation of this policy will result in the student's dismissal from the program.
2. More than six hours of "C" level work will result in the student's dismissal from the program.
3. Students may not enroll in the same course more than twice.
4. Qualifying and/or final examinations may be repeated once if failure occurs. In general, a student repeating any portion of the examinations must do so at the next administration of the examination.
5. After admission to candidacy, a student must be enrolled in a thesis course each regular semester until requirements for the degree are completed. In addition a student must be registered for a thesis course each session of the summer term if the student is to receive the degree in August or is involved in research or writing.

Under unusual circumstances and with the approval of the department chair and the student's supervising professor, a student may postpone registration for the thesis course for one or more semesters. Unless special permission has been granted, a student who is not continuously enrolled in a thesis course must repeat the candidacy examinations and apply for re-admission to candidacy.

Graduate Faculty

Professor James K. Esser
Social, industrial-organizational
psychology

Assistant Professor Oney D. Fitzpatrick
Developmental psychology, health
psychology, medical compliance

Assistant Professor Rolf F. Holtz
Social, industrial-organizational
psychology, personality

Associate Professor Joanne S. Lindoerfer
Clinical psychology, community
psychology

Professor Richard G. Marriott
Behavioral neuroscience, learning-
cognition, methodology

Professor James L. Walker, Jr.
Psychological measurement, statistics,
instrumentation and methodology.

Psychology Courses

- 512 Professional Orientation** 1:1:0
An orientation to the discipline and professional activities. Includes ethics, legalities, training standards, and professional roles. Assignments supplement other course work including research, teaching and field projects. Required of all graduate students for two semesters with a maximum of three semester hours allowed.
Prerequisite: Consent of instructor.
- 514 Special Topics** 1:A:0
Course work, library and/or laboratory work, and conferences with faculty member. A description of the particular area of study will be indicated. May be repeated for credit when topic varies.
Prerequisite: Consent of instructor.
- 530 Advanced General Psychology I** 3:3:0
A comprehensive overview of the history of psychology, systems of psychological thought, and the areas of behavioral neuroscience, sensation and perception, learning, motivation, and cognition. Emphasis will be placed on both background material and current research. May be taken out of sequence.
Prerequisite: Consent of instructor.
- 531 Advanced General Psychology II** 3:3:0
A comprehensive overview of the following areas of psychology: personality, developmental, social and abnormal. Emphasis will be placed on both background material and current research. In addition, the influence of lifestyle on health and wellness and the role of the professional psychologist in the process is considered. May be taken out of sequence.
Prerequisite: Consent of instructor.
- 532 Experimental Design** 3:3:0
A study of the research procedures and statistical techniques commonly used by the applied and theoretical psychologist in the design, execution, control and evaluation of experiments.
Prerequisite: Consent of instructor.
- 533 Individual Study** 3:A:0
Independent study of special topics or problems in industrial/organizational or community psychology. May be repeated for credit.
Prerequisite: Consent of instructor.
- 534 Special Topics in Psychology** 3:A:0
Includes coursework, library and/or laboratory work and conferences with a faculty member. A description of the particular area of study will be indicated. A student may repeat the course for credit when the area of study varies.
Prerequisite: Consent of instructor.
- 535 Multivariate Research Techniques** 3:3:0
Topics include multiple regression, factor analysis and the relationship of multiple regression to analysis of variance and covariance. The linear algebra necessary to deal with these topics is developed. Extensive practice with microcomputers is emphasized.
Prerequisite: Psy 532 or consent of instructor.
- 5310 Introduction to Psychological Assessment** 3:3:0
An introduction to intellectual assessment. Includes principles of psychological testing, test statistics, and critical evaluation of a variety of intellectual and achievement measures. Practicum in administration, scoring, interpretation, and formal psychological report writing for all Wechsler measures and the Stanford-Binet.
Prerequisite: Admission to candidacy and Psy 5320.
- 5311 Community Psychology: Introduction to Psychotherapy** 3:3:0
Specific psychotherapy skills, therapeutic communication and therapeutic practices are introduced using didactic techniques and role-playing. Includes models of individual, family and multimodal therapy, ethical principles in therapy, DSM-IV and diagnosis of psychopathology, Employee Assistance Programs, consultation and referral to other agencies. Other topics include professional orientation of the therapist, obtaining supervision and continuing education, and evaluating the effectiveness of therapy.
Prerequisite: Consent of instructor.
- 5312 Advanced Psychological Assessment** 3:3:0
An introduction to the broad area of personality assessment including DSM-IV classifications. Practicum in administration, scoring, interpretation, and formal psychological report writing with the MMPI-2, Rorschach, TAT, SCII, KOIS, and other objective and projective assessment devices. Includes coverage of lifestyles and career/vocational choices.
Prerequisite: Psy 5310.

- 5313 **Community Psychology: Advanced Psychotherapy** 3:3:0
An in-depth study of psychotherapy theories and intervention strategies for individuals and groups. Distinctions will be made between normal human growth and abnormal human behavior. Includes ethics, legal/cultural considerations, and lifestyles.
Prerequisite: Psy 5311 and admission to candidacy.
- 5320 **Theory and Techniques of Psychological Measurement** 3:3:0
A study of procedures used in the development, evaluation, and application of psychological measuring instruments. Topics include bivariate linear correlation, nonlinear correlation, multiple and partial correlation, classical true score theory, validation techniques, and test construction techniques.
Prerequisite: Consent of instructor.
- 5321 **Advanced Industrial Psychology I** 3:3:0
Social and organizational factors in the work place. Emphasis on theories of organizational/group dynamics, social foundations of influence, leadership and growth/development.
Prerequisite: Consent of instructor.
- 5322 **Advanced Industrial Psychology II** 3:3:0
Psychological principles and techniques applied to human resources management. Techniques include job analysis, personnel selection, placement and training, performance appraisal, compensation and career development.
Prerequisite: Psy 5320 or consent of instructor.
- 5323 **Advanced Experimental Psychology** 3:3:0
Theory and application of experimental design in psychological research. Students will have an opportunity to design and conduct an original research study.
Prerequisite: Psy 532 or consent of instructor.
- 5330 **Practicum I** 3:A:0
Supervised training and experience in a local, state or regional agency, institution or employment setting. The specific nature of the practicum depends on the professional background and goals of the candidate and will be determined by the candidate, his/her faculty advisor and a member of the cooperating agency/organization. For Community Psychology students, practicum involves a minimum of 300 hours of work in a mental health setting, including a minimum of 100 hours of direct client contact, and one hour a week of individual supervision from a licensed professional.
- 5331 **Practicum II** 3:A:0
Supervised work in an area of interest to the student, Includes supervision by both a faculty member and a member of the cooperating agency/organization.
Prerequisite: Psy 5330.
- 6390-6391 **Thesis** 6:A:0
Prerequisite: Admission to candidacy.

Department of Sociology, Social Work, and Criminal Justice

The Department of Sociology, Social Work, and Criminal Justice offers Soc 532, Sociology of Education in support of the Master of Education degree program.

Graduate Faculty

Associate Professor Stuart A. Wright
Religion, social groups

Professor Kevin B. Smith
Social inequality, sociology of
education

Sociology Courses

- 532 **Sociology of Education** 3:3:0
A study of the multicultural influences on the institutions of education. Included will be a sociological analysis of educational problems in Texas.

College of Business

The College of Business offers a program of study leading to the Master of Business Administration degree (MBA). The MBA program is fully accredited by the American Assembly of Collegiate Schools of Business (AACSB). The objective of the MBA Program at Lamar University is to provide intensive, rigorous training to produce managerial professionals with a thorough conceptual understanding of the economic, legal, and ethical environment of public and private sector organizations and the capability of applying analytical, problem solving skills to a broad range of decision situations that may arise within one or a combination of functional areas within the organization.

Students with degrees in **non-business** fields as well as business undergraduates are *encouraged* to earn the Master of Business Administration degree. Students are encouraged to make an appointment with the Associate Dean **60-90 days in advance** of the semester in which they wish to enroll, and to take the GMAT in the semester *prior* to the desired date of enrollment.

Admission

Persons seeking admission to this program must meet the general requirements for admission outlined elsewhere in this Bulletin, with the following exceptions:

1. The student is *required* to take the Graduate Management Admission Test, GMAT.
2. The applicant's undergraduate grade point average and GMAT scores must equal or exceed the minimum standards. The student must meet at least one of the following standards:
 - A. A total of at least 950 points based on the formula: 200 times the overall undergraduate GPA for the first baccalaureate degree (4.0 system) plus the GMAT score. (See Note below)
 - B. A total of at least 1,000 points based on the formula: 200 times the GPA (4.0 system) of the last 60 hours of undergraduate work for the first baccalaureate degree, plus the GMAT score. (See Note below).

Note: Students must make a minimum score of 450 on the GMAT for unconditional acceptance regardless of GPA. Students who make 400-450 and meet either standard "A" or "B" above will be admitted conditionally pending satisfactory completion of nine hours with a "B" (3.0) average. A student who makes less than 400 on the GMAT will **not** be admitted regardless of GPA.

3. A student whose native language is not English is expected to score over 525 on the TOEFL.
4. Post Baccalaureate students are not permitted to enroll in Business courses for graduate credit without the *prior* consent of the Associate Dean.

Degree Requirements

First Year Courses (Designed primarily for students whose undergraduate degree is *not* Business).

ACC 530 Financial Accounting: Concepts and Procedures
 ECO 530 Foundations of Economics
 BLW 530 Legal Environment of Business
 BAC 530 Statistical Analysis for Decision Making
 MGT 530 Foundations of Organization Behavior
 MGT 531 Operations Management and Information Systems

MGT 532 Administrative Policy and Strategy
 OAS 530 Administrative Communications
 MKT 530 Marketing Concepts
 FIN 530 Foundations of Finance

Note:

1. Please see course descriptions for prerequisites for each course.
2. Students with previously approved academic training may have some or all of the first year courses waived. (See the Associate Dean, College of Business, prior to enrollment.)
3. Students must have met the entrance requirements for the MBA Program to enroll in first year courses. All exceptions must have the **prior** approval of the Associate Dean, College of Business.
4. First year courses may not be taken as second year course electives.
5. All students need to be advised by the Associate Dean **prior** to each semester.

Second Year Courses

Note:

1. All first year courses must normally be completed before beginning the second year courses.
2. The candidate for the MBA degree may follow either of the two plans described below.

Plan I: Thesis Route

ACC 537 Managerial Accounting
 MGT 533 Seminar in Management
 ECO 537 Managerial Economics
 FIN 531 Financial Management
 MKT 531 Seminar in Marketing
 BAC 531 Advanced Statistical Theory and Analysis for Business
 ECO 538 Environment of Business
 Three semester hours of approved electives in the College of Business
 BA 669A Thesis
 BA 669B Thesis

Note: Once enrolled in thesis, a student must be continually enrolled in the thesis course each Fall, Spring, and once in the summer, until the thesis is completed.

Plan II: Non-Thesis Route

ACC 537 Managerial Accounting
 MGT 533 Seminar in Management
 ECO 537 Managerial Economics
 FIN 531 Financial Management
 MKT 531 Seminar in Marketing
 BAC 531 Advanced Statistical Theory and Analysis for Business
 ECO 538 Environment of Business
 MGT 538 Business Research
 Twelve semester hours of approved electives in the College of Business.

A written comprehensive exam will follow the completion of course work.

Plan II: Accounting Emphasis

A MBA degree with an accounting emphasis is available for students that have an undergraduate degree in Accounting who wish to meet the requirements for the 150 hour program which will be required to sit for the CPA Examination in Texas

beginning in May 1998. This program requires the student to follow Plan II (non-thesis route). For those under the accounting emphasis, ACC 532 (Accounting Theory) is substituted for ACC 537. In addition, ACC 533 (Advanced Auditing), ACC 534 (Tax Research), and ACC 535 (Advanced Cost) are substituted for nine of the twelve hours of electives in Plan II.

Graduate Faculty

Assistant Professor Soumava
Bandyopadhyay

Marketing

Professor Cynthia Barnes
Office Administration

Professor Melvin F. Brust
Finance

Professor Frank Cavaliere
Business Law

Professor Jai-Young Choi
Economics

Associate Professor Richard A. Drapeau
Business Statistics

Professor Lynn Godkin
Management

Professor Charles Hawkins
Economics

Professor Richard W. Jones
Accounting

Associate Professor D. L. Jordan
Management Information Systems

Assistant Professor Huei Lee
Management

Assistant Professor Bradley Mayer
Management

Professor Carl B. Montano
Economics

Associate Professor Jimmy D. Moss
Finance

Assistant Professor E. Shawn Novak
Accounting

Professor Donald Price
Economics

Assistant Professor Kabir C. Sen
Marketing

Professor Larry W. Spradley
Business Statistics

Professor Robert A. Swerdlow
Marketing

Assistant Professor Celia B. Varick
Accounting

Business Courses

Accounting courses must be selected from the following list:

- 530 **Financial Accounting: Concepts and Procedures** 3:3:0
Intensive examination of financial accounting. A conceptual study of the Generally Accepted Accounting Principles (GAAP) that impact financial reporting to persons and institutions outside the reporting entity. Attention is given to the three primary financial statements required: balance sheet, income statement and statement of cash flows. Special emphasis is given to intercorporate investments and business combinations, leases, pensions, inflation, foreign operations and financial statement analysis.
Prerequisite: Graduate standing.
- 531 **Taxation for Graduate Students** 3:3:0
Provisions of the income tax code as applied to individuals and business in the measurement of income, deductions, gains and losses, and other impacts of the law on business decisions.
Prerequisite: Graduate standing, ACC 530.
- 532* **Accounting Theory** 3:3:0
An in-depth examination of both existing and normative accounting theory. The text is supplemented with outside readings. Significant oral and written reports are required.
Prerequisite: Graduate standing with a minimum of eighteen semester hours of accounting which must include six semester hours of Intermediate.
- 533* **Advanced Auditing** 3:3:0
Concentration on the practice of public accounting and auditing in an environment which requires a clear understanding of audit purposes, basic principles, and audit judgment.
Prerequisite: Graduate standing and the equivalent of undergraduate degree.

- 534* Tax Research** 3:3:0
An extensive examination of the methods employed to determine defensible solutions to problems in federal taxation. Emphasis is placed upon research methodology, proper documentation of research findings and effective communication of research findings to interested parties. The text is supplemented with outside readings and case studies. Significant oral and written reports are required.
Prerequisite: Graduate standing with a minimum of eighteen semester hours of accounting that include ACC 338 and ACC 339 or their equivalent and six semester hours of Intermediate.
- 535* Advanced Cost** 3:3:0
In-depth study of accounting for the production function; process costing, spoilage, joint products; evolving trends in allocation and quantitative methodology; microcomputer analysis for planning and control.
Prerequisite: Graduate standing and the equivalent of undergraduate degree.
- 537 Managerial Accounting** 3:3:0
Application of accounting data in decision making: cost analysis as applied in the development of budgets and standards; accounting as a tool for cost control and pricing; case problems, using the micro-computer as a decision-making tool, which require students to interpret and discuss their analysis in the context of managerial decision-making. Course must be completed with a grade of "B."
Prerequisite: Graduate standing, ACC 530.
- 539 Special Topics in Accounting** 3:3:0
Investigation into special areas in accounting under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.
- *These classes are intended for MBA students pursuing the MBA degree with accounting emphasis.

Economics courses must be selected from the following list:

- 530 Foundations of Economics** 3:3:0
This is a fast-paced course which discusses both macro and micro economic theory and international economic issues. Macroeconomic topics covered include: inflation, unemployment, fiscal and monetary policy. Microeconomic topics include: demand theory, production and cost theory, price and output determination in markets, demand for and pricing of society's scarce resources.
Prerequisite: Graduate standing.
- 5301 Money and Capital Markets** 3:3:0
Survey of the functions and performances of financial institutions; analysis of the sources and uses of funds in financial markets, market structures of interest rates; and flow of funds analysis.
Prerequisite: Graduate standing, Eco 530.
- 533 International Finance** 3:3:0
A study of international financial decision-making. Measurement, determinants and control of the flow of payments among nations. The spot and forward exchange markets: clearing, hedging, speculation, exposure and official intervention. Short- and long-term portfolio capital movements. Direct foreign investments and multinational corporations. The working and growth of Eurocurrency and Eurobond markets.
Prerequisite: Graduate standing, Fin 530.
- 535 Economics of Entrepreneurship/Consulting** 3:3:0
A study of business development or acquisition from the perspective of both personal ownership and outside consulting. This course is primarily a case-method study which provides the student with the methodology for analyzing business problems and finding solutions for those problems.
Prerequisite: Graduate standing, Eco 530.
- 537 Managerial Economics** 3:3:0
A study in the depth of the principles and techniques of economic analysis applicable to the problems of business management.
Prerequisite: Graduate standing, Eco 530.
- 538 The Environment of Business** 3:3:0
A study of business, government, and consumer interaction in the economy. Efficiency concepts for both the private and public sectors are discussed. Government activities in antitrust, traditional regulation, and new firms operating in foreign markets are reviewed.
Prerequisite: Graduate standing, Eco 530.
- 539 Special Topics** 3:3:0
Investigation into special areas in economics under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ.
Prerequisite: Graduate Standing and approval of instructor, department chair and deans.

Finance courses must be selected from the following list:

- 530 Foundations of Finance** 3:3:0
A survey of the financial management function in private business firms, with emphasis on major financial policy decision issues and the analytical techniques used to assist management in making those decisions.
Prerequisite: Acc 530, Eco 530.
- 531 Financial Management** 3:3:0
A study of the financial policy of business firms along with the theory supporting that policy. Topics include capital budgeting, capital structure, cost of capital, dividend policy, and management of working capital, as well as the unique international dimensions of the financial policy of multinational firms.
Prerequisite: Graduate standing, Fin 530 or equivalent.
- 532 Seminar in Finance** 3:3:0
Study of selected topics reflecting contemporary trends and problems in the field of Finance. The course may be repeated for a maximum of six semester hours when the topic varies.
Prerequisite: Graduate standing, Fin 531 or consent of instructor.
- 533 International Finance** 3:3:0
A study of international financial decision-making. Measurement, determination and control of the flow of payments among nations. The spot and forward exchange markets, clearing, hedging, speculation, exposure and official intervention. Short- and long-term portfolio capital movements. Direct foreign investments and multinational corporations. The working and growth of Eurocurrency and Eurobond markets.
Prerequisite: Graduate standing, Fin 530.
- 539 Special Topics in Finance** 3:3:0
Investigation into special areas in finance under the direction of a faculty member. This course may be repeated for credit when topics of investigation differ.
Prerequisite: Graduate Standing and approval of instructor, department chair and deans.

Management courses must be selected from the following list:

- 530 Foundations of Organization Behavior** 3:3:0
A study of organizational behavior and management concepts. The course will examine the development of management thought, with special emphasis on motivation, leadership and organizational theories. Topics will include awareness of individual behavior, social interaction, the dynamics of group and intergroup behavior and the effects of the total system of behavior observed with the organization.
Prerequisite: Graduate standing, Acc 530, Eco 530.
- 531 Operations Management and Information Systems** 3:3:0
Fundamentals of management information systems, including computer applications; mathematical modeling techniques and decision support systems will be examined with respect to production and information systems. Emphasis is given to the concepts, processes and institutions in the production of goods and services, and to the integrating role of information systems in the effective and efficient use of organizational resources.
Prerequisite: Graduate standing, Bac 530.
- 532 Administrative Policy and Strategy** 3:3:0
Socio-political change taking place in even remote areas of the globe are impacting on the strategic initiatives of businesses; small and large, international and domestic. This course will focus on the role of top management in welding functional areas such as marketing, management, and finance to fulfill strategic organizational aims. Economic and socio-political conditions existing in various world regions will be considered.
Prerequisite: Graduate standing, Mgt 530.
- 533 Seminar in Management** 3:3:0
A course designed to give students an integrated approach to management through the application of theory to problem solving situations. Students perform in consulting roles applying management as both science and art. Emphasis is placed on national and international problems and a synergistic effect made to provide positive and applied solutions to actual managerial decisions making.
Prerequisite: Graduate standing, Mgt 532.
- 538 Business Research** 3:3:0
The student will design and carry out an individual research project under the supervision of a faculty member. Emphasis will be placed on research design and methodology, sources of business and economic data and the use of quantitative techniques to achieve substantive research results.
Prerequisite: Graduate standing, Mgt 532.
- 539 Special Topics in Management** 3:3:0
Investigation into special areas in management under the direction of a faculty member.
Prerequisite: Graduate Standing and approval of the instructor, department chair, and deans.

Marketing courses must be selected from the following list:

- 530 Marketing Concepts** 3:3:0
Marketing orientation and concepts; marketing programs of domestic and global perspectives in the formulation and development of strategies with regard to price, product, channels of distribution, and promotion of goods and services within an ever-changing environment.
Prerequisite: Graduate standing, Acc 530, Eco 530.
- 531 Seminar in Marketing** 3:3:0
An intensive study of specific marketing concepts and theories. Marketing strategies for the national and multinational firms are surveyed. Emphasis is placed on reading from current journals and other related publications.
Prerequisite: Graduate standing, Mkt 530.
- 532 Marketing Strategies and Problems** 3:3:0
A survey of current literature and case studies involving marketing strategies in a dynamic environment. Development of analytical skills, critical thinking and communication skills are directed toward a set of simulated business scenarios.
Prerequisite: Graduate standing, Mkt 530.
- 533 Buyer Behavior and Strategies** 3:3:0
An in-depth study of social and psychological influences on the ultimate and organizational buyer behavior and decision-making processes. Major concepts, models, and theories regarding buyer behavior will be emphasized with emphasis on marketing strategies and environmental changes.
Prerequisite: Graduate standing, Mkt 530.
- 534 International Marketing** 3:3:0
Analysis and planning of marketing mix on an international scale. The course focuses on the aspects of international marketing such as the international market, the identification of global opportunities and threats, the formulation of international marketing strategy, and the organizations and control of global marketing.
Prerequisite: Graduate standing, Mkt 530.
- 539 Special Topics in Marketing**
Investigation into special areas in marketing under the direction of a faculty member.
Prerequisite: Graduate Standing and approval of the instructor, department chair, and deans.

Administrative Service courses must be selected from the following list:

- BAC 530 Statistical Analysis for Decision Making** 3:3:0
Theory and applications of presenting and utilizing data for decision making in business situations. Topics include methods of gathering, presenting, and analyzing quantitative data; probability theory; probability distributions; sampling theory; estimation and tests of hypotheses; simple linear regression/correlation analysis; classical time series; and other statistical procedures commonly used in business analysis.
Prerequisite: Graduate standing.
- BAC 531 Advanced Statistical Theory and Analysis for Business** 3:3:0
An advanced course in statistical theory and application of the quantitative techniques commonly used in business research and analysis. Advanced topics in sampling theory, statistical inferences, and regression/correlation analysis are presented. Specific topics include analysis of variance; multiple linear and non-linear regression/correlation analysis; classical time series and forecasting; decision theory; and other statistical models. Students will have the opportunity to use a standard statistical software package.
Prerequisite: Graduate standing, BAC 530 or equivalent.
- BAC 533 Business Forecasting** 3:3:0
A course designed to provide an integrated approach to developing a strategy for making business forecasts. Emphasis will be placed on the importance of the selection of an appropriate data set, various forecasting techniques, and the trends through autoregression models and Box-Jenkins techniques will be considered along with other regression and econometric models.
Prerequisite: BAC 531.
- BAC 539 Special Topics in Business Analysis** 3:3:0
Intensive investigation of topics in business analysis. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.
- BLW 530 The Legal Environment of Business** 3:3:0
A survey of the legal environment of business including concepts of legal rules, the legal framework to resolve disputes, a study of the concept of property rights, contracts, commercial paper, agency and employment laws, government regulations of business through administrative agencies, and introduction to international law.
Prerequisite: Graduate standing.

- BLW 531 The International Law of Business** 3:3:0
Origin, composition and application of international law to the multinational business environment. Topics include the International and Transcontinental Judicial Systems, International Treaties on the Regulation of Business, the Foreign Corrupt Practices Act, Import-Export Laws and the rights and responsibilities existing between foreign government and multinational business engaged in international business enterprise.
Prerequisite: Graduate standing, BLW 530.
- BLW 535 Estate Planning Fundamentals** 3:3:0
A survey of the federal and state laws dealing with the estates of individuals, including living trusts, estate tax-saving trusts, charitable trusts, spendthrift trusts, providing for children, avoiding probate, minimizing estate taxes, second marriages, protecting businesses at death, gifts, wills, and living wills.
- BLW 539 Special Topics in Business Law** 3:3:0
Intensive investigation of topics in business law. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.
- MIS 534 Multimedia Applications** 3:3:0
This course covers the use of personal computers to develop multimedia applications. The use of various hardware and software components in the production of multimedia systems is stressed. Working in a workgroup using a Local Area Network with shared resources is emphasized. The most current hardware and software tools for processing text, graphics, sound, video and animation are made available to the student. Class projects require hands-on use of authoring and applications packages. Students develop and present an interactive multimedia system project.
- MIS 535 Managerial Decision Support Systems** 3:3:0
The focus of the course is an analysis of the functional information support systems which serve the manager. These systems provide quantitative-based information derived from one or more data bases within an organization and are used to help managers in the decision-making process. Theoretical concepts are applied to real-world applications.
Prerequisite: Graduate standing.
- MIS 536 Seminar in Information Systems Management** 3:3:0
This seminar provides a broad overview of the information systems management function. The course emphasizes information systems management with particular attention to planning, organizing, and controlling user services and managing the computer information systems development process.
Prerequisite: Graduate standing.
- MIS 539 Special Topics in Management Information Systems** 3:3:0
Intensive investigation of topics in management information systems. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.
- OAS 530 Administrative Communication** 3:3:0
Communication theory and practice with emphasis on variables affecting organizational communication. Intrapersonal, organization, and technological dimensions of communications. Specific areas include cultural and international differences in communication; one-to-one, small group and large group communications; formal and informal networks; electronic transmission; business letters and memoranda; and research papers and formal reports.
Prerequisite: Graduate standing.
- OAS 531 Contemporary Problems in Business Education** 3:3:0
Problems and materials in teaching business subjects; analysis of various teaching techniques; examination of recent research and experimentation. When the course is offered in sufficiently different areas, students may repeat the course for credit with the approval of the department head.
Prerequisite: Graduate standing and suitable background.
- OAS 539 Special Topics in Office Administration** 3:3:0
Intensive investigation of topics in office administration. Library and/or laboratory work and conferences with supervising faculty member. May be repeated when area of study differs.
Prerequisite: Graduate standing and approval of instructor, department chair, and dean.

Thesis courses necessary for graduation under Plan I.

- BA 6390-6391 Thesis**
Students must be continually enrolled in Thesis each Fall, Spring, and at least once in the Summer, until the thesis is completed.
Prerequisite: Approval of Associate Dean, College of Business.

College of Education and Human Development

The College of Education and Human Development offers graduate programs of study leading to the Master of Education degree in six different areas and to the Master of Science degree in Kinesiology and in Family and Consumer Sciences.

Persons seeking admission to these programs must meet the general admission requirements of the College of Graduate Studies and of the individual department in which they plan to enroll. Admission to a degree program does not imply admission to candidacy for a degree.

Degrees Offered

- Master of Education in Counseling and Development
- Master of Education in Educational Administration
- Master of Education in Elementary Education
- Master of Education in Secondary Education
- Master of Education in Special Education
- Master of Education in Supervision
- Master of Science in Kinesiology
- Master of Science in Family and Consumer Sciences

Professional Certificates Available

- Counselor
- Educational Diagnostician
- Elementary Education
- Mental Retardation
- Mid-Management Administrator (Principal)
- Reading Specialist
- School Superintendent
- Secondary Education
- Special Education Supervisor
- Supervisor
- Visiting Teacher

General Information Concerning Professional Certificates

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the specialized areas designated on the face of the certificate. Information about requirements for a particular certificate can be obtained from the department offering the certification program. Once all requirements for a certificate are completed it is the responsibility of the student to go to the Office of Professional Services and Admissions in the College of Education and Human Development and make application for the certificate to be awarded by the Texas Education Agency.

Early Childhood Development Center

The Early Childhood Development Center is an educationally oriented model program for children between the ages of 18 months and five years. The Center, under the direction of the Department of Family and Consumer Sciences and The College of Education and Human Development, is an integral part of professional development for graduate students.

The Center is used extensively by the Department of Family and Consumer Sciences, the Department of Professional Pedagogy, the Department of Health, Kinesiology and Dance, and the Department of Educational Leadership. The Center provides opportunities for University students to direct learning of young children who exhibit both typical and atypical development as well as to investigate effective teaching strategies for promoting optimal development among young children. Students have the opportunity to observe and interact with children which enhances understanding of child growth and development. In addition the students are able to relate understanding about the family, nutrition, prenatal care and community interaction to child behavior.

In addition, the Center provides interdisciplinary research opportunities for faculty and graduate students. The laboratory school is also used for strengthening leadership skills in the field of child development through seminars, workshops, and other educational events.

Department of Educational Leadership

Department Chair: Dr. Bob Thompson

204 Education Bldg.

Program Advisors:

Phone: 880-8689

Counseling and Development: Dr. Curtis Wills, Dr. Carolyn Crawford, Dr. William Holmes, Dr. George McLaughlin

Educational Administration: Dr. Bob Thompson, Dr. Clinton Ogilvie

Supervision: Dr. Clinton Ogilvie

The Department of Educational Leadership offers graduate programs leading to the Master of Education (M.Ed.) degree in Educational Administration, Supervision, and Counseling and Development. For students already holding a master's degree and teacher certification, the Department offers course work leading to certification as a Superintendent, Mid-management (principal), Supervisor, and School Counselor.

Course prerequisites for the state examination for Licensed Professional Counselor certification are also offered by this department.

Admission

Admission to a master's degree program or a post-master's "certificate only" program is required of all students taking courses in the Educational Leadership Department. A maximum of six semester hours may be taken prior to admission. Non-admitted students wishing to transfer courses to another department or another university must have permission of the department chair before registering.

Admission to a Master's Degree Program

To be admitted to a program leading to a Master's degree in Educational Administration, Counseling and Development, or Supervision, students must fulfill the general requirements for admission to the Graduate College as stated elsewhere in this bulletin plus the departmental requirements. The Educational Leadership Department requires a minimum score of 400 on the Verbal and Quantitative sections of the Graduate Record Exam with a minimum combined Verbal and Quantitative score of 900. Test of English as a Foreign Language (TOEFL) is not accepted as a substitute for minimum scores on the Graduate Record Exam. If a student has applied for admission to a degree program and has not received notification of acceptance (or non-acceptance) within 30 days after application the student should check with the Graduate Admissions Office.

Admission to Candidacy for Master's Degree

After completing at least 12 semester hours of course work on the master's degree with a minimum of 6 semester hours in his/her major field, the student should apply for Admission to Degree Candidacy. Forms for admission to candidacy should be obtained from the Educational Leadership Department Office and returned there upon completion. (NOTE: University regulations require the student be admitted to candidacy prior to beginning the last nine hours of course work). If a student does not have a letter certifying admission to candidacy within 30 days after making application the student should check with the department office.

Step by step procedure for admission to a Master's degree program

1. Apply for Admission to the Graduate College of Lamar University.
 - A. Obtain application packet from the Graduate Admissions Office in Room 208 of the Wimberly Building or call (409) 880-8350.
 - B. Successfully complete the Graduate Record Examination and have scores sent to Graduate Admissions, Lamar University, P.O. Box 10009, Beaumont, TX 77710.
 - C. Have all transcripts sent to Graduate Admissions as in B above.
2. Meet with program advisor to develop a degree plan. **NOTE:** No deviations from the degree plan will be permitted without prior written permission of advisor or department head.
3. In consultation with graduate advisor, select members of graduate committee. (The program advisor will chair this committee.)
4. Complete at least 12 hours of course work from their degree plan (at least six semester hours must be from courses in their major) and apply for Admission to Candidacy. **NOTE:** A Student must be admitted to candidacy **prior to beginning** the last nine hours of course work.
5. Complete remaining course work.
6. Complete requirements for graduation.
 - A. Apply for graduation in the Graduate College office (101 Wimberly).
 - B. Take and pass comprehensive examination during the last semester of attendance. To take the comprehensive examination a student must be in his/her last semester of coursework, have no incompletes ("I" grade) or unsatisfactory ("D" or "F" grades) on their transcripts and have met all other requirements for graduation.
7. Graduate.

NOTE: Completion of some Master's programs also includes completion of all course requirements for an additional certification. Student desiring the additional certificate must apply to take the appropriate ExCET Exam at the Office of Professional Services and Admissions. After successfully passing the exam, the student should apply at the Certification Office for the certificate.

Admission to a "Certification Only" (non-degree program)

The Educational Leadership Department offers post master's certification programs leading to certification as a Superintendent, Mid-Management (Principal), Supervisor and School Counselor. Students who hold a master's degree and teacher certification and seek an additional certification offered by this department should apply to the Educational Leadership department for admission to the appropriate certification program. Upon completion of the application and receipt of an official transcript, a program

advisor will be assigned. The advisor will develop a certification plan for the student. After completion of the certification plan requirements the student must apply for and pass the ExCET examination and file for the certificate at the Certification Office. Students seeking a program leading to examination for certification as a Licensed Professional Counselor should follow the process designated above and then contact the State Board of Examiners for Professional Counselors in Austin, Texas to apply for licensure and take the licensure exam.

Master's Degree in Counseling and Development

The Master's Degree in Counseling and Development requires the successful completion of a comprehensive 45 semester hour program of study. Students interested in pursuing a degree in Counseling and Development can secure an up-to-date degree plan from the Department of Educational Leadership, in the Education Building or by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

Certification In Counseling and Development

Professional School Counselor's Certificate

A student who completes requirements for a Master of Education degree in Counseling and Development will have fulfilled all curriculum requirements for a Professional School Counselor's Certificate.

Students already holding a Master's degree from an accredited university may enter the "Certification Only" program by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan for the student. After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building. Prerequisites for the certificate include Texas teacher certification and three years of acceptable classroom teaching experience.

Licensed Professional Counselor's Certificate

The Texas State Board of Examiners of Professional Counselors regulates licensing requirements for counselors to render services in the state of Texas through private practice, group practice, institutions, organizations and similar types of arrangements. Students who need additional information or wish to complete academic work toward licensure as a Licensed Professional Counselor (LPC) should see the Counseling and Development faculty in the Department of Educational Leadership or contact the Texas State Board of Examiners of Professional Counselors in Austin, Texas.

Master's Degree in Educational Administration

The Master's degree in Educational Administration requires successful completion of a 36 semester hour program of study. A student may choose a degree plan with an emphasis in building administration (mid-management) or in school business administration. Students who choose the Master's degree in mid-management and wish to apply for Professional Mid-Management Administrator certification must complete all degree requirements plus 12 additional semester hours of prescribed course work. The Master's

degree with emphasis in school business administration prepares students for proficiency in that field. Texas has not adopted standards for school business administrator certification.

Certification in Educational Administration

Professional Mid-Management Administrator Certification

A student who completes requirements for a Master of Education degree in Educational Administration will have fulfilled the first 36 semester hours of the 48 semester hours required for a Mid-Management certificate. An additional twelve semester hours are required for the Mid-Management certificate. The student's degree plan will include the additional courses required for certification.

Students already holding a Masters Degree from an accredited university may enter the "Certification Only" program for Mid-Management certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the Mid-Management certificate a student must complete all requirements for Master's Degree in Educational Administration, complete the additional twelve semester hours of course work, hold a valid Texas Teacher certificate, have 2 years of classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Education Building.

Professional Superintendent Certificate

Prerequisites for the Professional Superintendent Certificate include a Master's degree and Professional Mid-Management Administrator certification. Students who meet these prerequisites and wish to seek certification as a school superintendent should apply to the Department of Educational Leadership. Upon completion of the application and receipt of an official transcript of graduate work an advisor will be assigned to develop a certification plan for the student. Students meeting the prerequisites can usually obtain certification as a superintendent by completing twelve to fifteen additional semester hours plus a year-long internship. After completion of the certification plan the student must take and pass the ExCET examination and apply for the certificate at the Office of Professional Services and Admissions in the Education Building.

Master's Degree in Supervision

Students interested in pursuing a master's degree in Supervision can secure an up-to-date degree plan from the Department of Educational Leadership in the Education Building or request a copy by writing to the Department of Educational Leadership, P.O. Box 10034, Lamar University, Beaumont, Texas 77710.

Certification in Supervision

A student who completes requirements for a Master's degree in Supervision will have fulfilled all curriculum requirements for a Professional Supervisor Certificate. Students already holding a Master's degree from an accredited university may enter the "Certification Only" program for Supervision certification by making application in the office of the Department of Educational Leadership and providing an official transcript of all

applicable graduate work. Once admitted, students will be assigned an advisor who will develop a certification plan.

To receive the certificate a student must complete all requirements for a master's degree in Supervision, hold a valid Texas teacher certificate, have 3 years of acceptable classroom teaching experience, take and pass the ExCET examination, and apply for the certificate at the Office of Professional Services and Admissions in the Educational Building.

Graduate Faculty

Professor David L. Bost
Educational foundations
Associate Professor Carolyn Crawford
Counseling and development
Associate Professor William R. Holmes
Counseling and development
Professor George McLaughlin
Counseling and development
Associate Professor Clinton Ogilvie
Educational administration

Professor Bob Thompson
Educational administration and
supervision
Associate Professor Jerry R. Tucker
Educational administration and
supervision
Associate Professor Curtis E. Wills
Counseling and development

Counseling and Development Courses (C&D)

- | | | |
|------|--|-------|
| 5301 | Human Growth and Development
A study of normal human development and the stages of physical intellectual, social and emotional growth from prenatal origins through old age. | 3:3:0 |
| 5310 | Individual and Group Facilitation Skills
An introduction of facilitation skills and theory. Indepth analysis and demonstration of various facilitation techniques for use with both individuals and groups. (This is a pre-practicum course.)
<i>Prerequisite: C&D 5311 or C&D 5312 or permission of instructor.</i> | 3:3:0 |
| 5311 | Individual Counseling Theories and Techniques
Theories of individual counseling with an emphasis on techniques and applications. | 3:3:0 |
| 5312 | Group Counseling Theories and Techniques
An analysis of group counseling theories, processes and techniques.
<i>Prerequisite: C&D 5311.</i> | 3:3:0 |
| 5320 | Cross Cultural Counseling
Studies in human diversity and cultural issues. Identifies the implications for counseling and learning and strategies for cross cultural effectiveness in various settings. | 3:3:0 |
| 5321 | Test Administration and Interpretation
Theoretical and practical study emphasizing the administration, scoring and basic interpretation of individual psychological tests. Students will be trained to administer the Wechsler tests, the Stanford-Binet or other individual assessment instruments.
<i>Prerequisites: EDLD 5334 or permission of instructor.</i> | 3:3:0 |
| 5322 | Program Administration, Ethics and the Law
Organizing and implementing a counseling program or practice with an emphasis on legal issues, ethical principles and professional standards of conduct. | 3:3:0 |
| 5323 | Career Development
A focus on theories of vocational choice, vocational assessment, sources of occupational and educational information and the career decision process.
<i>Prerequisites: C&D 5322.</i> | 3:3:0 |
| 5350 | Abnormal Human Behavior
A study of various symptom categories in psychopathology. The course will include an analysis of the diagnostic categories as well as the research concerning etiology and treatment.
<i>Prerequisites: Approval of instructor.</i> | 3:3:0 |

- 5351 Consultation** 3:3:0
This course has an emphasis on developing consultation skills for the counselor. Methods and techniques to assist the counselor in implementing appropriate consultation skills for problem management, intervention or prevention.
- 5380/5680 Seminar in Counseling and Development** 3:3:0
Designed to advance the professional competence of participants. For each seminar, a description of the particular area of study will be indicated. May be repeated for credit when nature of seminar differs sufficiently from one previously taken. A maximum of six hours in institutes may be applied toward a Master's degree.
- 5381 Advanced Seminar in Social and Family Relations** 3:3:0
An intensive exploration of the dynamics of interpersonal relationships, including family and social issues. A critical analysis of various techniques and approaches will be established. Development and demonstration of personal counseling skills will be of major concern.
Prerequisites: C&D 5322, C&D 5311.
- 5382/5682 Selected Instruction Topics** 3:3:0
Significant topics in Counseling and Development. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours are the same as those required by a formal instructional course. With permission of advisor in student's major field, course may be repeated when topic varies.
- 5390A/5390B School Counseling Practicum** 3:3:0
A field-based course with supervised observation and practice of guidance and counseling in a school setting during the school day.
Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements before beginning internship. A maximum of one additional course may be taken any semester in which a student is enrolled in a practicum.
- 5391A/5391B Community Counseling Practicum** 3:3:0
A field-based course of supervised observation and practice of guidance and counseling in an agency setting.
Prerequisite: Must be within 6 semester hours (excluding practicum) of completing program requirements before beginning internship. A maximum of one additional course may be taken any semester in which a student is enrolled in a practicum.

Educational Leadership Courses (EDLD)

- 5301 Research Methods** 3:3:0
Introduction to skills and techniques necessary for descriptive research in education problems. Emphasis on planning, designing, and methodology. One-third time in laboratory exercises and writing a research proposal and report.
- 5306 Computer Applications for Administrators** 3:3:0
Application of computers and selected computer software to information management, scheduling, and other functions of administration.
- 5311 Fundamentals of Administration** 3:3:0
A study of the relationships between and among human behavior, belief systems and administrative style.
- 5326 Communications and Public Relations** 3:3:0
Developing personal and mass media communication skills with emphasis on improving school-community relationships through effective communication techniques.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5332 School Services and Special Programs** 3:3:0
Study of the organization and administration of vocational, exceptional learner, and adult education programs. Such services as attendance, food service, maintenance, and textbooks will be examined in detail.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5333 Campus Planning and Problem Solving** 3:3:0
A study of short and long-range planning and problem solving techniques. Special emphasis will be given to applications in an individual campus.
- 5334 Tests, Measurement, and Evaluation** 3:3:0
Analysis and evaluation of types of tests and measurement devices will be conducted. Methods of determining the reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate tests will be included. Evaluation systems of individuals and programs will be discussed.
- 5335 Curriculum Management** 3:3:0
Models of curriculum development and evaluation with particular emphasis on the management of these functions.
Prerequisites: EDLD 5311, EDLD 5352 and admission to the program.

- 5339 Organizational Behavior** 3:3:0
Study of school as an organization and how individuals behave in organizations. Students will assess and compare their own personal competencies to the administrative needs of a selected school.
Prerequisite: EDLD 5311
- 5342 School Finance for Principals** 3:3:0
Analysis of principles of school finance to include problems of budgeting, accounting, and administration of funds.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5343 Educational Facilities Planning** 3:3:0
Evaluation and administration of school facilities and the relationship of facilities to the achievement of educational objectives.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5344 School Law** 3:3:0
Interpretation and implementation of school law including a study of the Texas Education Code and the Handbook for Public School Law.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5345 Personnel Administration** 3:3:0
Fundamentals of human relations and organizational behavior in developing programs of recruitment, selection, assignment, evaluation, promotion and termination of personnel. *Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.*
- 5352 Instructional Leadership** 3:3:0
Techniques of improving instruction through application of research on effective schools and models of instruction.
- 5354 Team Supervision** 3:3:0
Role of peers in formative evaluation. Emphasis on team approach to the improvement of instruction.
Prerequisites: EDLD 5311, EDLD 5352 and admission to the program.
- 5356 Teacher Appraisal** 3:3:0
Techniques of summative evaluation with particular emphasis on Texas Teacher Appraisal System. All requirements of TTAS training are included in this course.
Prerequisites: EDLD 5352 and admission to the program.
- 5371 The School Superintendent** 3:3:0
Role and responsibilities of the superintendent as chief administrative officer of the district.
Prerequisite: Certification in Mid-Management.
- 5375 School Budgeting and Information Systems** 3:3:0
Advanced analysis of school budgeting systems, accounting and the Public Education Information Management System. The course is designed for prospective school superintendent and business managers.
- 5381 Independent Study** 3:3:0
Supervised investigation into special areas of education under the direction of a graduate faculty member. May be repeated for credit when topic of investigation varies.
Prerequisite: Consent of department chair.
- 5387 Seminar in School Administration** 3:3:0
Study of basic concepts and principles of school administration as applied to selected topics. Special attention will be given to new and developing programs and to administrators' roles in these programs.
Prerequisites: EDLD 5311, EDLD 5339 and admission to the program.
- 5188/5688 Selected Instructional Topics** 3-6:3:0
Study of significant topics related to administration and supervision of schools. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours are the same as those required by a formal instructional course. With permission of advisor in the student's major field, course may be repeated when topic varies.
Prerequisites: Admission to the program and permission of advisor.
- 5396 Internship Business Administration** 3:3:0
Designed to give the prospective business manager job-related experience under the joint supervision of a school administrator and faculty of Lamar University-Beaumont.
- 5397 Internship for Supervision** 3:A:0
Designed to give the prospective supervisor job-related experience under the joint supervision of a school district supervisor and faculty of Lamar University.
Prerequisite: Must have completed all courses in the major and be within 3 semester hours (excluding internship) of completing certification requirements.

5398A/5398B Internship for Mid-Management

3:3:0

Designed to give the prospective principal or middle level administrator job-related experience under the joint supervision of a school administrator and faculty of Lamar University. (Must be taken in 2 consecutive semesters or 1 long term and 1 summer term.)

Prerequisites: Masters Degree in Educational Administration and within 3 semester hours (excluding internship) of completing mid-management certification.

5399 Internship for School Superintendent

6:A:0

Designed to give the prospective superintendent job-related experience under the joint supervision of a school superintendent and faculty of Lamar University. Must be completed in consecutive semesters (Fall & Spring) in the same academic year.

Prerequisites: Certification in Mid-Management and within 6 semester hours (excluding internship) of completing superintendency certification. A maximum of one additional course may be taken in any semester in which a student is enrolled in an internship.

Department of Professional Pedagogy

Department Chair: Dr. Doyle Watts

**202 Education Building
Phone: 880-8673**

Director of Professional Services and Admissions:

**Dr. Charles Burke
206 Education Building
Phone: 880-8902**

The Department of Professional Pedagogy offers programs leading to the Master of Education (M.Ed.) degree in Elementary Education, Secondary Education, and Special Education. In addition, the Department offers course work leading to six different Professional Certificates. It is the goal of the Master of Education and the Professional Certificate programs to provide the academic climate and practical experience necessary to produce teachers and other specialists of superior competence in their chosen areas of specialization.

Students who wish to pursue a Master of Education and/or a Professional Certificate should contact the Director of Professional Services and Admissions well before the beginning of the semester in which they plan to enroll.

Master of Education (M.Ed.)

General Requirements

To be accepted into a program leading to a Master's Degree in Education the student must:

1. Fulfill the general requirements for admission and the general degree requirements as stated elsewhere in this bulletin.
2. Meet the undergraduate prerequisites appropriate to the chosen program of study. These requirements include:
 - A. The applicant in elementary education must have completed 18 semester hours in education, including 6 semester hours in elementary education methods and materials courses.
 - B. The applicant in secondary education must have completed a minimum of 18 semester hours in education. At least 12 of the 18 hours must be at the 300 level or higher.
3. The student may elect to write a thesis. If so, the student is required to complete a minimum of 30 hours plus the thesis.
4. The student who does not write a thesis must earn a minimum of 36 hours of graduate credit and is required to pass a written comprehensive examination administered during the last semester of attendance.

Step by Step Procedure

1. Apply for Admission to the Graduate College of Lamar University.
 - A. Obtain application packet from the Graduate Admissions Office in Room 208 of the Wimberly Building or call (409) 880-8350.
 - B. Take the Graduate Record Examination and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10009, Beaumont, Texas 77710.
 - C. Have all transcripts sent to Graduate Admissions as in B above.
2. Meet with program advisor to develop a degree plan. **NOTE:** No deviations from the degree plan will be permitted without written permission of the Director of Professional Services and Admissions.
3. In consultation with the Director of Professional Services and Admissions, select members of graduate committee. (The program advisor will chair this committee.)
4. Complete at least 12 hours of graduate-level course work in the department and apply for Admission to Candidacy. **NOTE:** Students must be admitted to candidacy before beginning their last nine hours of course work.
5. Complete remaining course work.
6. Complete requirements for graduation
 - A. Apply for graduation in the Graduate College office (101 Wimberly).
 - B. Pass comprehensive examination
7. Graduate

Degree Plan in Elementary Education

To meet individual needs, considerable flexibility is allowed in planning the student's program; however, the usual pattern of course work is as follows:

1. **Professional Development.** Six semester hours must be selected from the following courses:
 - Ped 531 Research for Teachers (Req)
 - Ped 534 Advanced Study in Human Development
 - Ped 535 Psychology of Pedagogy
 - Ped 537 Public School Curriculum
2. **Resource Area.** 12 semester hours must be selected from the following courses (nine semester hours if the student elects to write a thesis):
 - Ped 536 Problems in Teaching Science and Social Studies in the Elementary School
 - Ped 538 Modern Mathematics in the Elementary School
 - Ped 539 Teaching of Reading in the Elementary School
 - Ped 5393 Seminar in Language Arts
 - Ped 5395 Diagnostic/Prescriptive Procedures in Reading
3. **Specialization Area.** Six semester hours of courses must be taken for graduate credit from one or a combination of the following disciplines: history, English, foreign languages, mathematics, science, art, music, speech or health and physical education.
4. **Electives.** 12 semester hours (nine semester hours if student elects to write a thesis) from any of courses listed below or in a concentrated area.
 - A. **Reading Specialist**
 - Ped 539 Teaching of Reading in the Elementary School
 - Ped 5385 Literature: Pre K-12

Ped 5395 Diagnostic/Prescriptive Procedures in Reading
 Ped 5396 Clinical Practicum in Reading

B. Early Childhood Education

Ped 5351 Advanced Study in Early Childhood Curriculum
 Ped 5352 Creative Activities in Early Childhood Education
 Ped 5354 Trends and Issues in Early Childhood Education
 Ped 5355 Analysis of Program Implementation in Early Education

C. Supervision

Ped 5334 Tests Measurements & Evaluation
 Ped 5352 Leadership and Evaluation of Instruction
 Ped 5397 Practicum and Seminar
 Ped 5354 Instructional Supervision

D. Special Education

Ped 5361 Survey of Learning Potentials of Exceptional Children
 Ped 5364 Behavior Modification and Contingency Management of Disabled Learners
 Ped 5365 Instructional Processes With Exceptional Children
 Ped 5366 Modification of Curriculum and Instruction for the Atypical Learner

E. Gifted/Talented Endorsement

Ped 5356 The Gifted Learner
 Ped 5367 Creativity and the Gifted Learner
 Ped 5358 Identification and Assessment of Gifted/Talented Learner
 Ped 5359 Gifted/Talented Curriculum
 Ped 5360 Practicum

NOTE: To fulfill requirements concurrently for a Master's degree and for a Professional Certificate, a student may complete 12 additional graduate hours in an area of undergraduate specialization and substitute these hours for 12 hours in the elective area.

Degree Plan in Elementary Education With Professional Certification in Reading

1. To fulfill requirements concurrently for a Master's degree and Professional Certification in Reading, the student:
 - A. Must meet general requirements for a Master of Education degree.
 - B. Must hold a valid Texas Provisional Elementary or Secondary Certificate.
 - C. Must have completed a minimum of three years of creditable classroom teaching.
2. **A. Professional Development Area: Six semester hours.**
 - Ped 531 Research for Teachers (Req)
 - Ped 534 Normal Human Growth and Development
 - Ped 535 Psychology of Pedagogy
 - Ped 537 Public School Curriculum
- B. Resource Area: Six semester hours.**
 - Eng 5312 Studies in Language and Linguistics
 - Ped 5367 Cross Cultural Counseling

or

 - Soc 532 Educational Sociology

- C. Reading Specialization Requirements:** Eighteen semester hours
 Ped 539 Teaching of Reading in the Elementary School (Req)
 Ped 5395 Diagnostic/Prescriptive Procedures in Reading (Req)
 Ped 5385 Literature: Pre K-12 (Req)
 Ped 5396 Clinical Practicum in Reading (Req)
 Ped 5393 Seminar in Language Arts
 Ped 536 Problems in Teaching Science and Social Studies in the Elementary School
 Ped 538 Modern Mathematics in the Elementary School
- D. Professional Secondary: Six semester hours**
 Ped 5319 Problems in Secondary School Instruction
 Ped 5320 Adolescent Development
 Ped 5321 Strategies for Individualizing Secondary Education
 Ped 5312 Research and Instruction in the Middle School

Professional Certificates in Elementary Education

The applicant should hold or be eligible for a Provisional Certificate before admission into a professional program and have three years of teaching experience before being recommended for the Professional Certificate.

Requirements for the Professional Certificate follow an outline prescribed by the Texas Education Agency, consequently, the format for the certificate and the format for the degree are not identical. By selecting a program and with careful planning, a student may fulfill concurrently requirements for the Master's degree and requirements for a Professional Certificate in Elementary Education or the Reading Specialist Certificate. Specific information concerning these certificates may be obtained from the College of Education and Human Development Director of Professional Services and Admissions.

Other Certificates

It is possible for students to complete part or all of the requirements for a Provisional Teaching Certificate or an endorsement to such a certificate while working on a Master of Education degree in Elementary Education. Endorsements in areas such as mental retardation, physically handicapped/minimally brain injured, emotionally disturbed, learning disabilities, early childhood/exceptional children, gifted and talented may be adapted to such an arrangement. Specific information concerning these certificates may be obtained from the Director of Professional Services and Admissions.

Degree Plan in Secondary Education

To meet individual needs, considerable flexibility is allowed in developing the student's plan for a nonthesis or a thesis program; however, the usual pattern of course work is as follows:

- 1. Professional Development.** 18 semester hours must be taken as follows:

Required: Six semester hours

Ped 531 Research for Teachers (Req)

Ped 5320 Adolescent Development

Electives: 12 semester hours should be in one of the following areas:

Classroom Specialist

Reading Specialist

Foundations of

Gifted/Talented

Education

Supervision

A list of specific courses required or recommended in each of the concentrations is available from the Director of Professional Services and Admissions.

2. **Specialization Area.** For the nonthesis route to the degree, 12-18 semester hours of graduate work must be completed in one of the approved disciplines. A minimum of 12 hours must be taken at the 500 level for the 18-hour specialization. If the student elects to write a thesis or chooses the route leading to the Professional Teaching Certificate which requires a six-hour resource area exclusive of professional education and the specialization, the specialization requirement is reduced to 12 semester hours with at least six at the 500 level.

A plan listing the specific courses required to recommended is available through the Director of Professional Services and Admissions. Specialization areas are available in the following disciplines:

Biology	Kinesiology
Chemistry	History
Earth Science	Mathematics
Physics	English
Speech	Political Science

Degree in Secondary Education With Professional Certification in Reading

With a valid junior high school or high school teaching certificate and three years of classroom teaching experience, a student, may fulfill requirements for a Professional Reading Specialist Certificate (all levels) by completing the program below in lieu of content specialization.

1. **Professional Development:** Nine semester hours.
 Ped 531 Research for Teachers (Req)
 Ped 535 Psychology of Pedagogy
 Ped 534 Normal Human Growth and Development
 Ped 537 Public School Curriculum
2. **Resource Area:** Six semester hours.
 Eng 5312 Studies in Language and Linguistics
 Ped 5367 Cross Cultural Counseling
 or
 Soc 532 Educational Sociology
3. **Reading Specialization Requirements:** Eighteen semester hours
 Ped 539 Teaching of Reading in the Elementary School
 Ped 5385 Literature: Pre K-12
 Ped 5392 The Reading Process
 Ped 5393 Seminar in Language Arts
 Ped 5395 Diagnostic/Prescriptive Procedures in Reading
 Ped 5396 Clinical Practicum in Reading
4. **Professional Secondary:** Three semester hours
 Ped 5312 Research and Instruction in the Middle School
 Ped 5319 Problems in Secondary School Instruction
 Ped 5320 Adolescent Development
 Ped 5321 Strategies for Individualizing Secondary Instruction

Program Leading to Professional Teaching Certificate – Secondary

The Texas Education Agency issues a Professional Teaching Certificate to the candidate recommended by the college when he/she has completed an approved 30 semester hour program of credit beyond the bachelor's degree. This program must include work in

professional development, in a teaching specialization area and in a resource area. Requirements also indicate that the candidate must hold a Provisional Teaching Certificate and have three years of teaching experience. Specific requirements for the certificate may be obtained from the Director of Professional Services and Admissions.

Degree Plans in Special Education

To meet individual needs, some flexibility is allowed in planning the student's program; however, the usual pattern of course work is indicated below. If a student desires, he/she may complete requirements for a Provisional Certificate as an Educational Diagnostician or in Mental Retardation or in Supervision. In addition, the student may complete requirements for a Provisional Certificate in Special Education-Generic as part of the degree plan. This degree, if the student is pursuing one of the described certifications, is planned as a 36 semester hour non-thesis program. A student not seeking a certificate within the degree hours may complete a degree with a minimum of 30 semester hours plus a thesis.

To fulfill requirements concurrently for a Master's degree and Professional Certification in Supervision, the student also must have or complete a special education endorsement. The student should secure information concerning requirements for certification from the Director of Professional Services and Admissions. General information concerning Professional Certificates is presented in another portion of the College of Education and Human Development section of this bulletin.

A. M.Ed. in Special Education-Generic Certification

1. Professional Development Area: Nine semester hours required

- Ped 531 Research for Teachers (Req)
- Ped 534 Normal Human Growth and Development
- Ped 535 The Learning Process
- Ped 537 Public School Curriculum

2. Resource Area: (12 hours)

- Ped 5334 Tests, Measurements and Evaluation
(required)
- Ped 5361 Survey of Learning Potentials of Exceptional Children
(required)
- Ped 5698 A & B Practicum in Special Education

3. Specialization Area: (15 hours)

- Ped 5390 Reading and Language Arts for the Exceptional Child
- Ped 5362 Psychoeducational Evaluation of Exceptional Children
- Ped 5364 Behavior Modification and Contingency Management of Disabled Learners
- Ped 5365 Instructional Processes with Exceptional Children
- Ped 5366 Modifications of Curriculum and Instruction for the Atypical Learner

B. M.Ed. in Special Education-Mental Retardation Certification

1. Professional Development Area: Nine semester hours required

- Ped 531 Research for Teachers (Req)
- Ped 534 Normal Human Growth and Development
- Ped 535 The Learning Process
- Ped 537 Public School Curriculum

2. Resource Area. (12 hours)

- Ped 5334 Interpretation and Analysis of Tests and Measurements
(required)

Select three courses from those listed below:

- Ped 5340 Microcomputers for Educators
- Ped 5351 Advanced Study in Early Childhood Curriculum
- Ped 5367 Psycho-Social Foundations of Educating the Culturally Different
- Ped 5316 Administration and Supervision of Special Education Programs
- Ped 5698 Practicum II-Educating the Exceptional Child
- Ped 5362 Psychoeducational Evaluation of Exceptional Children
- Ped 5363 Practicum in Psychoeducational Procedures
- Ped 5365 Instructional Processes with Exceptional Children
- Ped 5366 Modifications of Curriculum and Instruction for the Atypical Learner

* Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement

3. **Specialization Area:** (15 hours)

Must be selected from the following courses or in concentrated area when attaining a specific certification.

- Ped 5315 Problems and Issues in Special Education
- Ped 5361 Survey of Learning Potentials of Exceptional Children
- Ped 5364 Behavior Modification and Contingency Management of Disabled Learners

4. **Student must select six additional hours from courses listed below:**

- Ped 5362 Psychoeducational Evaluation of Exceptional Children
- Ped 5363 Practicum in Psychoeducational Procedures
- Ped 5365 Instructional Processes with Exceptional Children
- Ped 5366 Modifications of Curriculum and Instruction for the Atypical Learner

C. **M.Ed. in Special Education-Educational Diagnostician Certification**

1. **Professional Development Area.** Nine semester hours required

- Ped 531 Research for Teachers (Req)
- Ped 534 Normal Human Growth and Development (Req)
- Ped 535 The Learning Process
- Ped 537 Public School Curriculum

2. **Resource Area.** (12 hours)

- Ped 5334 Interpretation and Analysis of Tests and Measurements (required)
- Ped 5335 Individual Testing (required)

Select two courses from those listed below:

- Ped 5340 Microcomputers for Educators
- Ped 5351 Advanced Study in Early Childhood Curriculum
- Ped 5367 Psycho-Social Foundations of Educating the Culturally Different
- Ped 5315 Problems and Issues in Special Education
- Ped 5316 Administration and Supervision of Special Education Programs

* Other selections must be approved by the chairperson of the student's committee and by the Director of Admissions and Advisement

3. **Specialization Area** (15 hours)

- Ped 5362 Psychoeducational Evaluation of Exceptional Children
- Ped 5363 Practicum in Psychoeducational Procedures
- Ped 5364 Behavior Modification and Contingency Management of Disabled Learners
- Ped 5365 Instructional Processes with Exceptional Children
- Ped 5366 Modification of Curriculum and Instruction for the Atypical Learner

Professional Certification in Special Education

Educational Diagnostician

Mental Retardation

Special Education Supervisor

Special Education Counselor

Specific information concerning these certificates may be obtained from the Director of Professional Services and Admissions.

Provisional Certificates in Special Education

Special Education

Generic

Students may obtain the provisional certificate in the above listed areas. A combination of graduate and undergraduate courses leading to the certificate is possible. Specific information concerning the certificate may be obtained from the Director of Professional Services and Admissions.

General Information Concerning Professional Certificates

The Professional Certificate is valid for life unless cancelled by lawful authority, and gives the holder legal authority to perform duties in the public schools of Texas in the specialized areas designated on the face of the certificate. It is the responsibility of the student to initiate the process of applying for certification by contacting the College Director of Professional Services and Admissions.

Requirements

1. Have completed the requirements for a Provisional Certificate.
2. Have at least three years of teaching experience.
3. Have completed an approved teacher education program.
4. Be of good moral character.
5. Be a citizen, or in the process of becoming a naturalized citizen of the United States.
6. Believe in and uphold the Constitution of the United States and the State of Texas.
7. Have completed, in a Texas institution of higher learning, a course or courses in which the Constitutions of the United States and the State of Texas have been given special emphasis.
8. Have completed at least six semester hours of American history or three semester hours in American history plus three semester hours in Texas history.
9. Pay an application fee of \$30.

Graduate Faculty

Professor Kenneth R. Briggs
Educational psychology
Professor Charles M. Burke,
School curriculum, mathematics
education
Associate Professor Mark J. Cooper
Early childhood
Assistant Professor Fara M. Goulas
Reading, special education
Professor W. Richard Hargrove
Educational psychology
Associate Professor Lula J. Henry
Reading

Associate Professor Andrea Karlin
Reading
Associate Professor Ed McCaskill
Science education
Associate Professor Desmond V. Rice
Reading, educational technology
Professor Doyle Watts
Educational Psychology
Professor William White
Foundations, educational
measurements

Professional Pedagogy Courses (PED)

531	Research for Teachers	3:3:0
	Introduction to skills and techniques necessary for descriptive research as applied to teacher education, with an emphasis on planning, designing and methodology. Research proposal required.	
532	Current Issues in Education	3:3:0
	Current controversies and trends in public education.	
534	Normal Human Growth and Development	3:3:0
	A study of development and nature of the human personality. Emphasis on recent psychological and biological experiments.	
535	The Learning Process	3:3:0
	History and systems of learning which have application to the classroom. Current theories and research in pedagogy.	
536	Problems in Teaching Science and Social Studies in the Elementary School	3:3:0
	A study of current developments, recent trends and innovative methods of teaching science and social studies in the elementary school, with emphasis upon individual teaching problems and research.	
537	The Public School Curriculum	3:3:0
	Analysis of the objectives, organization and content of the different areas of the public school curriculum in grades K-12. Emphasis is given to models of curriculum development and to techniques for curriculum improvement.	
538	Modern Mathematics in the Elementary School	3:3:0
	Problems, research and innovative methods in elementary mathematics. This course is designed for elementary teachers who wish to pursue individual problems. Research and recent methods and trends of teaching elementary mathematics.	
539	Teaching of Reading in the Elementary School	3:3:0
	Overview of reading: techniques, methods, approaches, materials, classroom management and organization.	
5390, 5490, 5590, 5690, 5391	Selected Instructional Topics	1-6:1-6:0
	Significant topics in Elementary, Secondary, Special Education, Supervision, Counseling, and Educational Administration. The description of the particular area of study will appear on the printed schedules of Lamar University each semester. Contact hours must be the same as those required by a formal instructional course. With permission of advisor in the student's major field, course may be repeated when topic varies.	
5306	Institute in Education	3:3:0
	Designed to advance the professional competence of participants. A description of the institute will be indicated. May be repeated for credit when nature of institute differs significantly from one previously taken. A maximum of six hours in institutes may be applied toward a Master's degree.	
5311	Individual Study in Education	3:A:0
	Supervised investigation into special areas of education under the direction of a graduate faculty member. May be repeated for credit when topic of investigation differs. <i>Prerequisite: Consent of department head.</i>	

- 5312 Middle School Teaching and Research** 3:3:0
Presentation of alternate teaching strategies in middle school programs. Exemplary organizational designs are examined with existing impact of research on middle schools.
- 5316 Administration and Supervision of Special Education Programs** 3:3:0
Analysis of the functions of special education in the administrative structure of the school; the principles and practices in administration and supervision in special education.
- 5319 Problems in Secondary School Instruction** 3:3:0
Consideration of the instructional problems encountered by experienced teachers in the secondary schools.
Prerequisite: One year of teaching experience.
- 5320 Adolescent Development** 3:3:0
Physical, mental, social and emotional characteristics of the adolescent; interests and problems; family and community relationships.
- 5321 Strategies for Individualizing Secondary Instruction** 3:3:0
An analysis of the strategies for individualizing instruction, including the techniques of diagnosis and prescription for learning problems. Studies of the open classroom, team teaching, independent study, learning modules, nongraded programs and other organizations for instruction are included.
- 5334 Tests, Measurement and Evaluation** 3:3:0
Analysis and evaluation types of tests and measurement devices will be conducted. Methods of determining the reliability and validity of tests are investigated. Designs for testing programs and selection of appropriate test will be included. Evaluation systems of individuals and programs will be discussed.
- 5335 Test Administration and Interpretation** 3:3:0
Theoretical and practical study emphasizing the administration scoring and basic interpretation and practice in the use of individual psychological tests. Students will be trained to administer the Wechsler tests, the Stanford-Binet or other subsequently developed individual intelligence scales.
- 5340 Microcomputers for Educators** 3:3:0
Designed to give teachers an awareness level of computer literacy and allow them to use the computer as an additional tool in the classroom.
- 5351 Advanced Study in Early Childhood Curriculum** 3:3:0
A comprehensive study of the organization, methods and materials used for instruction in Kindergarten and other programs for young children.
- 5352 Creative Activities in Early Childhood Education** 3:3:0
Teaching methods and materials for releasing creative expression with music, art and literature. Workshop approach with demonstration of art and music processes.
- 5354 Trends and Issues in Early Childhood Education** 3:3:0
An analysis of trends and issues in early childhood education.
- 5355 Analysis of Program Implementation in Early Education** 3:3:0
The inductive analysis and application of specific program and program implementation strategies to the development of cognitive, psychomotor and affective behaviors among young children.
- 5356 The Gifted Learner** 3:3:0
In-depth study of the characteristics and unique needs of gifted/talented students as they relate to both school and family settings. Understanding of the educational and psychological demands of giftedness and the role of counseling and counselors.
- 5357 Creativity and the Gifted Learner** 3:3:0
Introduction to theoretical constructs related to creative behavior. Emphasis on the development of competence in identifying the student's creative potential through the administration and interpretation of tests of creative behaviors and on strategies for enhancing the learner's creative behavior.
- 5358 Identification and Assessment of Gifted/Talented Students** 3:3:0
Theoretical and practical study emphasizing the selection, administration, and interpretation of tests related to identification and curricular planning for gifted and talented students. Attention to state/federal identification mandates and the design of an identification matrix and guidelines for its use in specific educational settings.
- 5359 Gifted and Talented: Curriculum** 3:3:0
Survey of models of gifted/talented education with attention to the development of appropriate goals and objectives for curriculum differentiation. Understanding of appropriate evaluation criteria at state/district/classroom levels.
- 5360 Practicum in Gifted Education** 3:3:0
Supervised internship in gifted/talented education providing the intern with an opportunity to demonstrate competence in program planning and instructional delivery in classroom/district settings. May not be taken until all four courses (12 semester hours) are completed.

- 5362 Psychoeducational Evaluation of Exceptional Children** 3:3:0
Simulated experiences in the use of formal and informal methods of appraising and communicating pupils' educational status and progress.
- 5363 Practicum in Psychoeducational Procedures** 3:3:0
Practicum experience in the use of formal and informal instruments in the evaluation of the psychoeducational and social development of children and the utilization of education and clinical data in individual teaching plans.
Prerequisite: SpEd 5362.
- 5364 Behavior Modification and Contingency Management of Disabled Learners** 3:3:0
The description of specific types of learning, the sequence in learning school-related tasks and the competencies to manipulate events to effect desired learning.
- 5365 Instructional Processes with Exceptional Children** 3:3:0
Competency in developing educational strategies for the remediation, amelioration or compensation of exceptionalism as it interferes with achievement or adjustment in school.
- 5366 Modification of Curriculum and Instruction for the Atypical Learner** 3:3:0
Information and familiarity with instructional materials necessary for meeting the special needs of exceptional learners. Utilization of Special Educational Instructional Materials Centers.
- 5367 Cross Cultural Counseling** 3:3:0
Studies delineating personal psychological characteristics and the affective domain of the culturally different. Identifies educational strategies applicable to the teaching process as well as other supportive pupil service.
- 5385 Literature: Pre K-12** 3:3:0
Emphasis on the selection of literature for children and adolescents, and the development of methods for using literature to develop skills in reading. Provision of experiences which will enable teachers to locate and select age level appropriate literature and to incorporate literacy studies in the curriculum at all grade levels.
- 5393 Seminar in Language Arts** 3:3:0
Application of research findings and modern theory to teaching and organizing the language arts in the elementary school. Examination of the relationships between language and cognitive development.
- 5395 Diagnostic/Prescriptive Procedures in Reading** 3:3:0
Study of the nature and causes of reading problems including observations, demonstrations, and supervised practice in the techniques of diagnosis; attention is given to interview procedures, standard and informal diagnostic instruments, the interpretation and utilization of standardized test data, and report writing.
Prerequisites: Edu 539, Edu 5392, Edu 5394.
- 6390-6391 Thesis** 6:A:0
Prerequisite: Approval of graduate advisor.

Special Education Courses (PED)

- 5698 Practicum in Special Education**
A&B Supervised experience in Special Education. The practicum is offered by arrangement between the university and the public school.
Prerequisite: Must be within 6 semester hours of completing all certification requirements and permission of advisor.
- 669A-669B Thesis** 6:A:0
Prerequisite: Approval of graduate advisor.

Graduate Resource Courses

These courses are not offered by the College of Education and Human Development but are required or suggested for certain degree plans.

- CS 5301 Computer Systems for Educational Applications** 3:3:0
Functional units of computers including both hardware and firmware; software; analysis, design and evaluation of computing configurations for educational applications; cost estimation techniques for both academic and administrative applications.
- Soc 530 Seminar in Sociology** 3:3:0
Basic concepts and principles of sociology as applied to the study of selected topics. Designed for education majors or other non-sociology majors.

Soc 532/m/Sociology of Education

3:3:0

A study of the multi-cultural influences on the institutions of education. Included will be a sociological analysis of educational problems in Texas.

Eng 5312/m/Studies in Language and Linguistics

3:3:0

Special problems in linguistics, such as the history of American English, regional dialects, new grammars. May be taken for credit more than once if the topic varies.

Department of Health, Kinesiology and Dance

The Department of Health, Kinesiology and Dance offers a program of study leading to the Master of Science degree in Kinesiology. It is designed to prepare professional personnel for employment in school and community settings and to prepare students for further graduate study at the doctoral level. Candidates seeking admission to the program must meet the general catalog requirements for admission to the College of Graduate Studies. They must also have a 2.5/4.0 undergraduate grade point average (overall or on the last 60 hours of undergraduate course work). They must also satisfy the necessary undergraduate prerequisites as prescribed for a particular area of specialization.

A teaching and research specialization is offered for those graduate students who are interested in advanced preparation for teaching in school and university settings, research opportunities, doctoral-level work and administrative responsibilities.

Degree Requirements

The candidates for the Master of Science degree in Kinesiology must meet all of the College of Graduate Studies general degree requirements as listed in the Graduate catalog. To be sure that requirements are met, students are encouraged to contact the graduate coordinator. Additional specific degree requirements are as follows:

1. Nine semester hours to include Kin 534 (Scientific Basis of Exercise), Kin 536 (Research Methods), and Kin 538 (Motor Learning).
2. The thesis is optional for specialization areas of teaching and research.

Graduate Faculty

Associate Professor Joel E. Barton III
Health

Professor E. Harold Blackwell
Kinesiology

Associate Professor Douglas Boatwright
Kinesiology, exercise physiology

Professor Vernon R. Crowder
Kinesiology, exercise physiology

Professor V. Raye Holt
Kinesiology, health

Professor Sonny Jolly
Kinesiology

Assistant Professor Carol Plugge
Health and Research

Kinesiology Courses (Kin)

530 Problems

3:A:0

Biological, physiological, social, psychological and other purposes and outcomes; selection and distribution of activities; facilities; teacher preparation; literature; research problems.

Prerequisite: Permission must be obtained from an active teaching member of the graduate faculty.

531 Sport in Society

3:3:0

An analysis of sport in American society. The study of the sociological processes that affect the individual as an active participant in sport and physical activity.

532	Seminar Designed to develop abilities in location and evaluating literature and research in Kinesiology and in allied fields. Course may be repeated for a maximum of six semester hours as the topic varies.	3:3:0
533	Sport Administration Developing analytical skills and attitudes of top management in administering the organization as a whole and the interrelationships of all problems in the organization. Establishment of strategic objectives, analysis of changing environments, developing strategies, formulating policies, decision making and problem analysis, personnel resource management.	3:3:0
534	Scientific Basis of Exercise A study of professional literature and laboratory experimentation on the role of physical activities and their effects on the human organism.	3:3:0
535	Trends and Issues Designed to assist the student to become knowledgeable on current trends and issues in the area of Kinesiology. Study will include historical, analytical and projective approaches. Course may be repeated for a maximum of six semester hours as the topic varies.	3:3:0
536	Research Methods Familiarity with types of research in Kinesiology with emphasis on tools and techniques of research and research design.	3:3:0
537	Basis of Sports Medicine Human environmental factors and their interrelationship in sports injury and their control; accident prevention and injury control in sports activities; philosophy of sports safety; contributions of sports medicine to safety and current trends and issues in sports medicine.	3:3:0
538	Motor Learning A formalized and scientific study of learning, performance and related factors as applied to gross motor skills.	3:3:0
5101, 5201, 5301	Workshop in Kinesiology This course is designed to advance the professional competence of graduate students in Kinesiology. Topics will vary. A description of the particular area of study will be indicated. Course may be repeated for a maximum of six semester hours if topic varies. A maximum of six semester hours of workshop may be applied to a degree program.	1-6:1-6:0
5311	Curriculum Development Emphasis given to models of curriculum development and to techniques for curriculum improvement. Analysis of objectives, organization and content.	3:3:0
5312	Independent Study Intensive study in an area of special interest. Course may be repeated for a maximum of six semester hours as the topic varies. <i>Prerequisite: Demonstrated competence for independent work and research methods, and consent of active teaching member of the graduate faculty.</i>	3:A:0
6390-6391	Thesis <i>Prerequisite: Approval of Graduate advisor.</i>	6:A:0

Department of Family and Consumer Sciences (formerly Home Economics)

The Master of Science degree in Family and Consumer Sciences allows students to choose courses from the areas of foods and nutrition, textiles and clothing, child development, family relationships, interior design, home management and home economics education. The degree program may be designed for professional advancement in nutrition/dietetics, counseling/family life education, vocational certification, apparel design/merchandising and other related fields. Workshops and travel/study tours along with regular daytime and evening classes make completion of a master's degree in Family and Consumer Sciences attainable and rewarding.

Persons seeking admission to this program must meet the general requirements for admission outlined elsewhere in this catalog and must have a 2.5/4.0 undergraduate grade point average (overall or on the last 60 hours of undergraduate work). A student must show evidence of competency in the undergraduate family and consumer sciences

curriculum: family life, consumer economics, and background of the profession. The requirement may be satisfied by completing undergraduate Family and Consumer Sciences courses or specifically designated graduate courses in areas of deficiency as approved by the department chair.

An approved preprofessional practice program in dietetics is available at the graduate level. Six semester hours of the required work may be applied to the master's program.

Degree Requirements

The Master of Science degree in Family and Consumer Sciences requires the completion of 30 semester hours of graduate work; a minimum of 18 in home economics, six in thesis and six in an approved supporting field. With the approval of the student's graduate committee, 12 semester hours of course work including a professional paper may be substituted for thesis.

The student's graduate program must include FCS 530, Research Methods in Family and Consumer Sciences; and FCS 5314, Statistical Theory and Analysis for Family and Consumer Sciences. These courses must be completed before or during the semester in which application for candidacy is submitted. No graduate student may submit a thesis proposal prior to completion of FCS 530 and FCS 5314.

A student must be enrolled in at least one graduate-level Family and Consumer Sciences course or in FCS 669B during the semester of graduation.

Graduate Faculty in Home Economics

Instructor Frances Droddy
Child development, program
administration, family science
Associate Professor Jane O. Hinchey
Equipment, research, consumer
science
Professor LeBland McAdams,
Clothing, fashion merchandising/
retailing, education

Assistant Professor Paula Nichols
Clothing, fashion merchandising/
retailing, education
Associate Professor Amy Pemberton, R.D.
Foods, nutrition/dietetics, research
Associate Professor Connie Elliff, R.D.
Foods, nutrition/dietetics, research
Assistant Professor Kim Walle
Family Studies

Family and Consumer Sciences Courses

- | | | |
|-----|---|-------|
| 530 | Research Methods in Family and Consumer Sciences
Introduction to skills and techniques necessary for conducting research in family and consumer sciences subject matter areas. Emphasis on research strategies, data preparation and analysis and research reporting. Research proposal required. | 3:3:0 |
| 531 | Recent Advances in Foods and Nutrition
Readings in and discussion of selected studies and recent developments in the field of nutrition and foods. Implications for dietitians, nutritionists, teachers, extension workers and others. | 3:3:0 |
| 532 | Clothing Design and Merchandising
An application of couture costume design principles and techniques related to construction and merchandising. | 3:2:3 |
| 533 | Heritage of Dress
A survey of costume history and customs which have affected garment styles. An analysis of historic costume and its contribution of civilization. | 3:3:0 |
| 534 | Problems in Clothing and Textiles
Individual and group investigations and discussions of special problems in the various phases of clothing and textiles. | 3:3:0 |

- 535 **Cultural Foods** 3:3:0
An overview of cultural influences on primitive and modern human dietary practices. Emphasis on how humans use culture to adapt to the physical, social and supernatural environments.
- 536 **Adolescent Nutrition** 3:3:0
A study of nutritional needs and concerns during adolescence.
- 537 **Resource Management Across the Lifespan** 3:3:0
Socio-economic changes, public policies and programs and management practices related to individual and family well-being through the various life cycle stages.
- 538 **Occupational Family and Consumer Sciences** 3:3:0
Philosophy and development of vocational family and consumer sciences education for secondary schools, colleges or universities with emphasis on occupational family and consumer sciences careers and jobs, curriculum trends and developments. Credit for course applied to six hours required for teaching in occupational family and consumer sciences programs.
Prerequisite: FCS 5308.
- 539 **Nutrition in Aging** 3:3:0
Study of the effects of aging on the nutritional status of the individual. The role of nutrition in the aging process is addressed.
- 5101, 5201, 5301, 5601 **Workshop in Family and Consumer Sciences**
Workshops designed to strengthen professional competence needed for addressing societal issues related to family and consumer sciences. May be repeated for credit when topic of interest varies. Credit: one to six hours.
- 5304 **Dietetic Seminar I** 3:3:0
Study of the delivery of nutritional services and consultation for individuals, families, and institutions. Students complete projects in menu analysis, client education, clinical nutrition, public health, food service management and related activities: Acceptance into Approved Preprofessional Practice Program in Dietetics.
- 5305 **Dietetic Seminar I** 3:3:0
A continuation of FCS 5304.
Prerequisite: FCS 5304.
- 5306 **Dietetic Practicum** 3:3:0
Supervised practice which includes an average of 32 hours per week field experience in the areas of clinical nutrition, community nutrition, and food service management. Rotations include hospitals and other health care facilities, community nutrition sites, and food service facilities. May not be applied toward a graduate degree.
Prerequisite: Acceptance into Approved Preprofessional Practice Program in Dietetics.
- 5307 **Dietetic Practicum** 3:3:0
A continuation of FCS 5306. May not be applied toward a graduate degree. Prerequisite: FCS 5305.
- 5308 **World of Work in Family and Consumer Sciences** 3:3:0
A study of occupational home economics education within the secondary curriculum focusing on development and supervision of occupational programs. (Credit for course applied to six hours required for teaching in occupational home economics programs.)
- 5310 **Maternal and Infant Nutrition** 3:3:0
A study of nutritional needs and concerns during pregnancy, lactation and infancy.
- 5311 **Advanced Textiles** 3:3:0
Analysis and comparison of recent scientific textile trends with reference to fiber content, yarn, fabrication, color and finish.
- 5312 **Resources in Family and Consumer Sciences Education** 3:3:0
Creative development, selection and evaluation of instructional materials including preparation, selection and use of visual materials.
- 5313 **Current Topics in Family and Consumer Sciences**
Intensive study of a current problem of professional interest in family and consumer sciences. The description of the particular area of study will appear on the printed semester schedule. May be repeated for credit when topic of investigation varies. Credit: three hours.
- 5314 **Statistical Theory and Analysis** 3:3:0
A study of statistical theory with application of quantitative techniques commonly used in family and consumer sciences research.
- 5315 **Independent Study** 3:3:0
Independent study in an area of interest; review of current literature and research related to individual problems; selection and/or design of instruments used in collecting data. May be repeated for credit when topic of investigation varies. Credit: three hours.

- 5316 Family Violence and Therapeutic Intervention** 3:3:0
Exploration of interpersonal violence throughout the life cycle from immediate and extended family members. Topics will include physical abuse, sexual abuse, and neglect perpetrated against children, spouses, and the elderly. The perspectives of law enforcement and treatment strategies will be explored.
- 5317 Family Communication** 3:3:0
A study of the interdisciplinary nature of family communication: theoretical approaches including systems, relational and interaction theories; application of theoretical insight and strategies for working with individuals and groups.
- 5318 Parenting** 3:3:0
Contemporary issues facing both parents and professionals who work with them; specific study of parenting skills, parenting in families with special needs and parent-school relationships.
- 5319 Single Parent Families** 3:3:0
Exploration of the formation of single-parent families with their varied memberships. Topics will include divorce, widowhood, economics, and support resources. The perspectives of law enforcement, social service agencies, and financial experts will be invited.
- 5351 Weight Management** 3:3:0
Diagnosis, etiology, classification, and treatment of weight problems.
- 5353 Vitamins** 3:3:0
In depth study of vitamins. History, chemistry, metabolism, functions, deficiency, excess, sources, assessment, and pharmacologic uses of each vitamin are discussed.
- 5355 Nutritional Epidemiology** 3:3:0
Principles and concepts in epidemiology are provided through lectures, discussion groups, assigned readings, exercises and activities. Emphasis is placed on epidemiologic studies that concern the relationship between diet and health and disease.
- 5357 World Hunger Issues** 3:3:0
Study of the effects of hunger on the nutritional status of the individual. Hunger problems are addressed through readings, discussion, and field trips.
- 5359 Sports Nutrition** 3:3:0
The role of nutrition is discussed as it relates to athletic performance and physical activity.
- 6390-6391 Thesis** 6:A:0
Prerequisite: Approval of graduate advisor.

College of Engineering

Graduate degree programs are offered as follows:

- Master of Engineering Management (M.E.M.)
- Master of Engineering Science (M.E.S.)
- Master of Engineering (M.E.)
- Doctor of Engineering (D.E.)
- Master of Science in Computer Science (M.S.)
- Master of Science in Environmental Engineering (M.S.)
- Master of Science in Environmental Studies (M.S.)
- Master of Science in Mathematics (M.S.)

Master of Engineering Management (M.E.M.)

The Master of Engineering Management is a non-thesis degree program with all courses offered after 4 p.m. Course work is designed to build onto the education received while completing an accredited bachelor's degree in engineering and the individual's professional experience. Hence, practicing engineers generally will not require undergraduate prerequisites.

A total of 36 credit hours are required at the graduate level. Included among these 36 credit hours are 15 hours of core courses required of all M.E.M. students. Course work in addition to the required core courses is tailored specifically to the needs of the student, but generally has approximately one-third of the courses in the general area of technical management, one-third in Business Administration, and one-third in the student's technical discipline such as Civil Engineering, Chemical Engineering, Electrical Engineering, Industrial Engineering or Mechanical Engineering.

Admission Requirements

Admission standards are designed to ensure that all enrolled students are qualified professionals serving in a leadership role in their engineering discipline. The four primary requirements are as follows:

1. B.S. in Engineering or Equivalent.
2. Graduate Record Examination (GRE) Scores (Verbal + Quantitative) = 1000 or more.
3. Two-to-five years of engineering experience in a leadership role.
4. Letter of recommendation for the program from someone in direct supervision over the applicant in his/her primary employment.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. Completion of a core program of 15 semester hours of specified courses.
3. Completion of a minimum of at least 36 semester from an approved list of courses. (See typical programs)

Step by Step Procedure

1. Obtain a Bachelor of Science Degree in Engineering.
2. Complete two-to-five years of professional practice in a position of leadership.
3. Apply for Admission to the Graduate College of Lamar University
 - a. Complete Graduate application, obtainable by calling (409) 880-8350

- b. Take GRE and have scores sent to: Graduate Admissions, Lamar University, P.O. Box 10009, Beaumont, Texas 77710.
- c. Have all undergraduate transcripts sent to Graduate Admissions.
- d. Have letter of recommendation from supervisor sent to: Coordinator of Engineering Graduate Programs, P.O. Box 10032, Beaumont, Texas 77710.
4. In consultation with Coordinator of Engineering Graduate Programs, select graduate committee.
5. Complete 12 hours of course work including at least three core courses and apply for admission to candidacy.
6. Complete remaining course work specified in candidacy application
 - a. Apply for Graduation
 - b. Obtain copy of Comprehensive Examination policy from Industrial Engineering Department.
 - c. Request and schedule Comprehensive Examination.
 - d. Pass Comprehensive Examination
7. Graduate

Core Courses

- | | | | |
|----|-----|------|---|
| 1. | Egr | 5369 | Engineering Management |
| 2. | IE | 432 | Statistical Decision-Making for Engineers |
| | | | or |
| | IE | 437 | Operations Research |
| 3. | IE | 4315 | Engineering Organization and Management |
| | | | or |
| | Egr | 5321 | Quality Control Systems |
| 4. | Egr | 5366 | Advanced Engineering Economics |
| 5. | Acc | 530 | Financial Accounting |
| | | | or |
| | Eco | 530 | Foundations of Economics |

Typical Program Options

Each student in consultation with an advisor should design a program tailored to meet his or her own specific educational objectives. The following typical program options are suggested. Substitutions and/or modifications to these programs can be accomplished with the approval of the student's advisor.

I. Manufacturing Management Concentration

Technical Discipline

Egr 5333 Production Control
 IE 437 Operations Research
 Egr 6349 CAM

Technical Management

*Egr 5369 Engineering Management
 *Egr 5321 Quality Control Systems
 *Egr 5366 Advanced Engineering Economics
 IE 432 Statistical Decision Making for Engineers

Business Administration

*Acc 530 Financial Accounting
 Acc 537 Managerial Accounting
 Eco 534 Collective Bargaining
 Eco 530 Foundations of Economics

II. Quality Management

Technical Discipline

Egr 6359	Computer Methods in SQC
Egr 5303	Regression Analysis
Egr 5319	Design of Experiments
IE 430	Statistical Quality Control

Technical Management

Same as Option I
Business Administration
Same as Option I

III. Construction Project Management (CE)

Technical Discipline

Egr 5390	Project Management Systems Elements of Construction
Egr 5387	Systems Stress Analysis
Egr 5318	Cost and Optimization
Egr 5308	Engineering

Technical Management

Same as Option I
Business Administration
Same as Option I

IV. Construction Project Management (CHE)

Technical Discipline

Egr 533	Computer Methods
Egr 5341	Mass Transfer
Egr 5344	Process Modeling
Egr 536	Thermodynamics

Technical Management

Same as Option I
Business Administration
Same as Option I

V. Instrumentation and Control (EE)

Technical Discipline

(Select 4)	
Egr 5364	Digital Hardware Design
Egr 6364	Micro Processor Design
Egr 535	Control Theory
Egr 532	Instrumentation
Egr 538	Digital Control

Technical Management

Same as Option I
Business Administration
Same as Option I

VI. Power and Energy (EE)

Technical Discipline

(Select 4)	
Egr 532	Instrumentation
Egr 5351	Power Systems I
Egr 5306	Linear Control Systems
Egr 6311	Computer Methods in Power Systems
Egr 5364	Digital Hardware

Technical Management

Same as Option I
Business Administration
Same as Option I

VII. Construction Project Management (IE)

Technical Discipline

Egr 5308	Cost and Optimization
Egr 5303	Regression Analysis
Egr 539	CAD/CAG
Egr 5305	Reliability

Technical Management

Same as Option I
Business Administration
Same as Option I

VIII. Construction Project Management (ME)

Technical Discipline (Select 4)

Egr 5308	Cost and Optimization Engineering
Egr 5318	Stress Analysis
Egr 5312	Heat Transfer
Egr 537	Thermodynamics - Energy Conversion
Egr 5313	Fluid Mechanics

Technical Management

Same as Option I
Business Administration
Same as Option I

Master of Engineering Science (M.E.S.), Master of Engineering (M.E.), and Doctor of Engineering (D.E.)

The Master of Engineering Science, Master of Engineering and Doctor of Engineering programs are administered by the Graduate Steering Committee. Students entering these programs are responsible to this committee until a permanent graduate committee including a chairman is selected and approved. The student should select an advisor and a permanent graduate committee must be formed before the student has completed 15 semester hours of graduate work. No credit toward a graduate degree will be granted unless approved by either the Graduate Steering Committee or the student's permanent graduate committee.

Core Course Categories for the M.E.S., M.E. and D.E. Programs:

Category	Course Number and Title
1.	Egr 6314 Computer Control and Instrumentation or Egr 6359 Computer Methods in Statistical Quality Control
2.	Egr 6349 Engineering Application or AI/Expert Systems or Egr 6389 Computer Aided Software Engineering
3.	Egr 6388 Computer Methods for Engineering Project Management
4.	Egr 6369 Computer Methods for Engineering Optimization
5.	Egr 6339 Hazardous Waste Management

Master of Engineering Science (M.E.S.)

The Master of Engineering Science Degree requires the completion of 30 semester hours of graduate course work, including thesis.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor's degrees at Lamar University.
3. These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 3 semester hours (one course) from those courses listed above as core courses.
3. A minimum of 21 semester hours (seven courses) of electives. Additional core courses may satisfy part of this requirement.
4. Satisfactory completion and defense of thesis (EGR 669A and EGR 669B).

Master of Engineering (M.E.)

The Master of Engineering Degree is a non-thesis 36 semester hour* program designed to suit the needs of the practicing engineer.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in a field of engineering or related discipline with credit substantially equivalent to that required for bachelor's degrees at Lamar University.
3. These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. Completion of one course from three of the five categories of core courses for a total of 9 semester hours of core course work. The core course categories and core courses are listed above.
3. A minimum of 27 semester hours* (nine courses) of electives. Additional core courses may satisfy part of this requirement.
4. Satisfactory completion of a final comprehensive examination.

*A graduate student who has passed the Fundamentals of Engineering Examination or a graduate student who is a Professional Engineer registered in the State of Texas (or registered in another state where requirements do not conflict with the provisions of the Texas Engineering Practice Act and are of a standard not lower than those specified in Section 12 of that Act) may satisfy course requirements by completing 24 semester hours of electives toward a total of 33 semester hours provided EGR 631 (Design Project) is included.

Master of Science in Environmental Engineering

Until recently, environmental engineers were primarily concerned with municipal water systems and sewage treatment facilities. The bulk of the course work dealt with the application of engineering solutions to human health problems. Today, the field includes the study of water quality, air quality and methods for disposing of toxic/hazardous wastes. Overall, environmental engineers are engaged in solving the large and complex environmental problems threatening the natural ecosystem.

The Master of Science in Environmental Engineering program is designed to provide engineers with the highly specialized chemical/civil engineering background needed by industry and by regulatory agencies on the federal, state and municipal levels.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in a field of engineering which is equivalent to a bachelor's degree at Lamar University.
3. Because of the diversity of the scientific disciplines which are admitted to the environmental studies program, some students may be lacking in certain fundamental subject areas, usually undergraduate level courses in engineering, microbiology, basic chemistry, geology, and/or mathematics. These courses must be taken in addition to the curriculum required for the master's degree program.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 21 semester hours (seven core courses) from those listed below

Egr	5330	Biological Waste Water Treatment
Egr	5329	Water Supply and Treatment
Egr	5320	Air Pollution Control
Egr	5350	Unit Operations in Environmental Engineering
Egr	6387	Hydraulics of Environmental Systems*
Egr	5342	Reactor Design for Environmental Systems
Pols	5353	Public Policy and Environmental Affairs

*with committee approval, Industrial Waste Treatment may be substituted

3. A minimum of 6 semester hours (2 courses) of designated electives from the list below.

Egr	5338	Solid Waste Management
Egr	6339	Hazardous Waste Management
Egr	5343	Industrial Waste Treatment
Egr	5334	Waste Minimization
Egr	5337	Incineration
Egr	5348	Advanced Air Pollution Control
Egr	6344	Multimedia Transport of Pollutants
Bio	5301	Microbiology
Chem	441	Biochemistry
Bio	443	Limnology
Bio	447	Ecology of Polluted Waters
Geol	4301	Hydrogeology
Chem	436	Inorganic Chemistry
Chem	535	Organic Chemistry
Egr	611	Research Seminar
Egr	5301	Seminar on Federal Programs for Environmental Management

4. Satisfactory completion and defense of thesis*

*with committee approval, 12 credit hours of Environmental Electives may be substituted.

Master of Science In Environmental Studies

The environmental studies program is designed for students who wish to continue to work in their scientific specialty but as it relates to environmental affairs. The degree is especially intended for individuals who wish to work in the evaluation, operations and/or regulatory aspects of the field as opposed to the design or engineering areas. Consequently, the program will provide an understanding of environmental problems and processes from the point of view of the chemist, biologist or geologist and provide the interdisciplinary perspective needed to cope with various environmental issues.

Admission Requirements

For admission to the program, the student must meet the following requirements:

1. The general requirements for admission to the College of Graduate Studies.
2. Hold a bachelor's degree in chemistry, biology, geology, the subdivisions of those fields e.g. microbiology, organic chemistry, hydrogeology, etc. of other closely related field with credit substantially equivalent to that required for bachelors' degrees at Lamar University.
3. Some applicants to this program may be required to take undergraduate level courses in engineering, geology, microbiology, basic chemistry and/or mathematics. These courses must be taken **in addition to** those required for the masters program and will be selected in consultation with the advisor early in a student's graduate career.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. A minimum of 6 semester hours (2 graduate courses) in the student's mathematics or science specialty.
3. A minimum of 12 semester hours (four core courses) from those listed below.

Egr	5330	Biological Waste Water Treatment
Egr	5329	Water Supply and Treatment
Egr	5320	Air Pollution Control
Egr	5350	Unit Operations in Environmental Engineering
Egr	6387	Hydraulics of Environmental Systems*
Egr	5342	Reactor Design for Environmental Systems
Pols	5353	Public Policy and Environmental Affairs (required)

*with committee approval, Industrial Waste Treatment may be substituted

4. A minimum of 9 semester hours (3 courses) of designated electives from the list below:

Egr	5338	Solid Waste Management
Egr	6339	Hazardous Waste Management
Egr	5343	Industrial Waste Treatment
Egr	5334	Waste Minimization
Egr	5337	Incineration
Egr	5348	Advanced Air Pollution Control
Egr	6344	Multimedia Transport of Pollutants
Bio	443	Limnology
Bio	447	Ecology of Polluted Waters
Bio	5301	Microbiology
Chm	436	Inorganic Chemistry

Chm	441	Biochemistry
Chm	535	Organic Chemistry
Geol	4301	Hydrogeology
Egr	611	Research Seminar
Egr	5301	Seminar on Federal Programs for Environmental Management

5. Satisfactory completion and defense of thesis*

*with committee approval, 12 credit hours of Environmental Electives may be substituted

Doctor of Engineering (D.E.)

The Doctor of Engineering Degree is designed to permit the practicing engineer to study practical engineering problems of a complex nature.

Admission Requirements

For admission to the program, the following requirements must be met:

1. The general requirements of the College of Graduate Studies.
2. The applicant must hold a Bachelor of Science degree in a field of engineering. The applicant must have an overall GPA and quantitative section of the GRE score which meets the following criteria: $(50 * \text{GPA} + \text{GRE}) \geq 800$. International students must have a minimum TOEFL score of 530.
3. The applicant must hold a Master's degree or have completed at least 30 semester hours of course work at the graduate level in a field of engineering or a closely related discipline.
4. These are minimum admission requirements and may be more selective for individual departments.

Degree Requirements

1. All of the College of Graduate Studies general degree requirements.
2. The student shall complete a residency of one year.
3. The student shall register for EGR 611, Professional Seminar, each semester in which the student is registered for more than six hours or in which the student is registered for field study. A minimum of 4 hours is required.
4. Completion of one course from each of the five categories of core courses for a total of 15 semester hours of core course work. The core course categories and core courses are listed above. Exceptions to this rule must be approved by the Doctoral Committee.
5. Completion of the diagnostic examination. This examination has the objectives of determining the student's qualifications for a doctoral program and to provide guidance for the selection of a study program. This examination must be completed before the student has earned 15 semester hours of course credit after admission to the program.
6. Completion of a minimum of 15 credit hours of field study preparatory courses in a concentration designed to form a cohesive degree plan and must be approved by the student's advisory committee. The field study preparation includes completion of one semester of EGR 632, Justification of Engineering Project.
7. Completion of candidacy examination. The purposes of this examination are to test the ability of the student to comprehensively relate the subjects of the study program and to ascertain the student's qualifications to perform the field study.

8. Completion of the field study. After the student is admitted to candidacy a formal engineering proposal format must be presented to the doctoral committee. Upon committee approval of the proposed field study the work is initiated. Normally, 30 semester hours of field study is required.
9. Defense of field study. Upon completion of the field study a formal engineering report with a standard format shall be submitted to the committee and defended in an oral examination.

Graduate Faculty

Assistant Professor Valentin V. Andreev Complex analysis	Professor Enno Koehn Construction, planning, scheduling and productivity. Design and analysis
Professor Wendell C. Bean Control systems, biomedical signal processing	Professor Hikyoo Koh Artificial intelligence, software testing, language translation, computational complexity analysis
Professor Daniel H. Chen Process control, optimization, numerical methods	Assistant Professor Sun Chai Lee Soil and foundation engineering, soil properties and behavior, geo- environmental engineering
Professor Hsing-wei Chu Operations research statistical decision analysis, networks	Professor Ku-Yen Li Mass transfer, thermodynamic properties, gas-liquid reactions
Associate Professor Paul Chiou Statistics, reliability theory	Research Professor Peter A. Mantz Ocean engineering, coastal and wave process
Professor Paul Corder Mechanical systems design; stress analysis; finite element models	Assistant Professor Mohsen Maesumi Numerical analysis, applied mathematics
Professor Saeed Daniali Structural analysis and design	Professor Alec L. Matheson Spaces of analytic functions, harmonic analyses
Assistant Professor Peggy Israel Doerschuk Neural networks, parallel processing, genetic algorithms, optimization	Professor Bernard J. Maxum Electromagnetics, antennas and propagation, rf, microwave, mm waves, optics
Assistant Professor Xing Fang Water quality management and modeling, environmental hydraulics, hydrodynamics, water resources engineering	Professor Harry T. Mei Computer applications, humidity control, solar energy
Professor David C. Gates Decision-making processes; plant layout, human factors, engineering management	Professor William E. Morgan Environmental engineering
Associate Professor John B. Harvill Computer architecture, microcomputer systems, database systems, programming languages, computer science education	Associate Professor Lawrence Osborne Parallel processing, operating systems, distributive systems, algorithms
Professor Tho-Ching Ho Fluidization, heat transfer, optimization	Professor Branislava Peruničić- Draženović Power systems, variable structure systems, graph theory applications in electrical engineering
Professor Jack R. Hopper Reaction kinetics, catalysis	

- Assistant Professor Jay R. Porter
Biomedical imaging, applied
electromagnetics, antenna design,
communications and signal
processing
- Professor David Read
Computer networks, operating systems,
natural language processing
- Assistant Professor G.N. Reddy
VLSI Design, artificial neural networks,
digital signal processing, Kalman
filtering
- Professor William E. Simon
Heat transfer, energy conversion,
fluid mechanics, thermodynamics
- Associate Professor James L. Thomas
Computer-aided manufacturing
Computer-aided design
- Professor Joseph T. Watt
Digital systems, microcomputers and
work stations
- Professor Carl L. Yaws
Physical and thermodynamic
properties, solar energy, cost
engineering
- Professor Fred M. Young
Fluid dynamics, heat transfer
- Professor Victor Zaloom
Engineering economics,
manufacturing productivity,
computer applications,
statistical quality control
- Associate Professor Wen-Ran Zhang
Computer engineering, cooperative
distributed artificial intelligence,
software engineering database

Engineering Courses

- 532 Instrumentation** 3:3:0
Consideration is given to the design and analysis of instruments that are used to interface with analog, microprocessor and minicomputer applications that involve data acquisition and process control.
- 533 Computer Methods in Engineering Analysis** 3:3:0
Computer techniques will be introduced and employed. Numerical methods for solving transcendental equations, polynomials, simultaneous linear algebraic equations and partial differential equations. Monte Carlo method, random numbers and simulation of engineering systems will be introduced.
May be repeated one time for graduate credit with prior approval where course content varies.
- 534 Continuous Control Systems** 3:3:0
Modeling of continuous variable systems; transfer functions; time-domain and frequency domain analysis; stability analyses; design of cascade compensation and feedback compensation.
- 535 Advanced Process Control** 3:3:0
Modern control theory concerning state-space formulation, multivariable control, optimal control, and discrete control for lumped/distributed parameter systems is addressed. Applications of control theory and the implementation of control strategies for the chemical processing industries are demonstrated.
- 536 Thermodynamics-Process Industry** 3:3:0
Thermodynamic laws are derived and applied to physical chemical phenomena. Ideal and non-ideal gas, liquid and solid solution behavior are developed for physical and chemical equilibria. Course credit in chemistry is optional.
May be repeated one time for graduate credit, with prior approval, where course content varies.
- 537 Thermodynamics-Energy Conversion** 3:3:0
The basic laws of thermodynamics are derived and applied in the analysis of power cycles, energy conversion and specific processes. Basic principles of irreversible thermodynamics and phenomenological relations are presented. An elementary statistical approach is presented with simple examples of the calculation of the transport properties of gases, liquids and solid.
May be repeated one time for graduate credit, with prior approval, where course content varies.
- 538 Discrete Control Systems** 3:3:0
Principles of digital and sampled-data control systems. Analysis of response, and stability. Analytical compensation by Z-transform and other methods. Extensive use of computers.
Prerequisite: EGR 5306.
- 539 CAD** 3:3:0
The analysis and the utilization of state of the art computer hardware and software to solve the problems associated with the utilization of computers in both graphics and engineering design problems.
Prerequisite: Graduate standing in the College of Engineering and consent of the instructor.

5101, 5201, 5301 Special Topics	3:1-3:0
An investigation into specialized study in advanced areas of engineering under guidance of a faculty member. This course may be repeated for credit when topics of investigation differ.	
5303 Regression Analysis	3:3:0
Review of regression analysis; theory of least squares; multivariate analysis; theory of the general linear hypothesis model.	
5305 Reliability	3:3:0
Statistical theories pertinent to solution of engineering problems in reliability; distribution and failure theory including failure rate and mean time to failure for the exponential, log normal, gamma and Weibull distributions.	
5307 Advanced Electromagnetics	3:3:0
Graduate-level topics in electromagnetic theory and applications. Assumes a grounding in electromagnetic fields and waves and methods for the solution of boundary value problems. <i>Prerequisite: EE 337 or equivalent.</i>	
5308 Cost and Optimization Engineering	3:3:0
Includes the mathematics of cost comparisons, profitability, productivity, and optimization with emphasis on processing or construction cost estimation and control. May be repeated for credit when the subject matter varies.	
5309 Problems in Design and Finite Analysis	3:3:0
Advanced techniques and analysis involving microcomputers, finite elements, finite differences. May be repeated for credit when the subject matter varies.	
5310 Advanced Concrete Design	3:3:0
Analysis and design of concrete members based upon working stress and strength design methods. Consideration given to pre-stressing or post-stressing of beams and structural components. May be repeated for credit when the subject matter varies.	
5311 Heat Transfer Analysis	3:3:0
Fundamental principles of heat transfer by conduction, convection and radiation. Emphasis will be given to the analysis of problems combining the various heat transfer mechanisms.	
5313 Fluid Mechanics	3:3:0
Fluid statics, fundamentals of fluid motion, systems and control volumes, basic laws, irrotational flow, similitude and dimensional analysis, incompressible viscous flow, boundary layer theory and an introduction to compressible flow. Vector methods will be employed.	
5314 Hydraulic Engineering	3:3:0
Design considerations of hydraulic systems including closed and open channel flow together with related hydraulic accessories. May be repeated for credit when the subject matter varies.	
5315 Theory of Elasticity	3:3:0
General analysis of stress and strain, equations of equilibrium and compatibility, stress and strain relations, two dimensional stress problems, elastic energy principles, thermoelastic problems. May be repeated for credit when the subject matter varies.	
5318 Stress Analysis	3:3:0
Topics in advanced strength of materials including unsymmetrical loading of beams, shear center, curved beams, torsion of non-circular cross sections, strain energy, virtual work, plasticity, fatigue, and introduction to the theory of elasticity. May be repeated for credit when the subject matter varies.	
5319 Design of Experiments	3:3:0
Experimental design and analysis of experiments are developed as tools of the manufacturing and process industries. Exploratory and evolutionary EVOP designs, analysis of variance ANOVA, error and regression are treated in some detail. <i>Prerequisite: Course in statistics or equivalent.</i>	
5320 Fundamentals of Air Pollution	3:3:0
Pollutant sources, emissions and transport. Air pollution control methods. Particulate collection theory, gaseous pollutant removal theory. Atmospheric sampling and analysis methods. May be repeated for credit when the subject matter varies.	
5321 Quality Control Systems	3:3:0
Application of statistical methods to industrial problems; regression and correlation theory; analysis of variance; use of control charts for control of manufacturing operations.	
5323 Advanced Steel Design	3:3:0
Analysis and design of structural members using steel. Consideration is given to elastic and inelastic buckling in beams and columns due to local, flexural, torsional and torsional flexural action. May be repeated for credit when the subject matter varies.	

- 5324 Wave Mechanics in Particulate Matter** 3:3:0
Propagation of elastic waves in semi-infinite media. Surface waves and body waves. Behavior of particulate masses under the effect of dynamic loading, impact and transient phenomena. Effect on substructures of waves from industrial, seismic and nuclear sources. Mechanical and electronic recording. May be repeated for credit when the subject matter varies.
- 5326 Waves and Coastal Processes** 3:3:0
Hydrodynamics of waves, wave generation, reflection, energy transmission and dissipation. Coastal phenomena, harbors and breakwaters, analysis of tides, and tidal currents. Salt water, fresh water interaction and diffusion in estuaries; erosion and shoaling in tidal waters. May be repeated for credit when the subject matter varies.
- 5327 Numerical Methods of Structural Analysis** 3:3:0
Matrix methods applied to analysis of trusses, beams and frames. May be repeated for credit when the subject matter varies.
- 5328 Inelastic Theory of Structures** 3:3:0
Investigation of structural behavior under conditions of overload. Design of structures using principles of ultimate strength and plastic design theories. Consideration of load and safety factors, stress redistribution and shakedown.
May be repeated for credit when the subject matter varies.
- 5329 Water Supply and Treatment** 3:3:0
An investigation of the chemistry of water treatment processes including the study of treatment process selection and associated design parameters.
- 5330 Biological Wastewater Treatment** 3:3:0
Principles of treatment for domestic and industrial wastewaters with emphasis on process kinetics and biological action.
- 5331 Similitude and Model Design** 3:3:0
Dimensional analysis, data processes, prediction equations and model design, including a study of distorted and dissimilar models. Models studied include structural fluid flow, thermal, electrical, magnetic, acoustical and illumination types. Various analogs from second-order ordinary and partial differential equations are also discussed. May be repeated for credit when the subject matter varies.
Prerequisite: Mth 434G recommended.
- 5332 Operations Research II** 3:3:0
Advanced topics in operations research-linear programming, non-linear programming, advanced topics in queuing and inventory theories, sensitivity analysis and dynamic programming.
Prerequisite: EGR 5316 or equivalent.
- 5334 Waste Minimization** 3:3:0
Waste minimization of hazardous waste includes any source reduction or recycling activity that results in volume reduction of hazardous waste or toxicity reduction. Waste minimization practices by major streams are reviewed. Technology and concepts that promote strategies by which waste minimization can be increased are identified.
- 5337 Incineration** 3:3:0
An overall view of the incineration principles, equipment and facility design, basic concepts, stoichiometric and thermodynamic considerations for incinerators, air pollution control equipment and economic considerations.
- 5338 Solid Waste Management** 3:3:0
A study of solid waste collection, transfer and disposal systems. Investigation of the reclamation of resources by multiple use, reuse and improvement of existing sources to meet quality requirements.
- 5341 Mass-Transfer Operations** 3:3:0
The principles of diffusion and mass transfer are considered. The study of gas-liquid operations includes humidification and design of equipment. Solid-fluid studies include absorption, ion exchange, drying and leaching operations. Less conventional mass-transfer operations are also considered.
- 5342 Reactor Design for Environmental Systems** 3:3:0
Development of the fundamentals for the rate of chemical reactions and biological reactions in homogeneous and heterogeneous systems. Analysis of ideal chemical reactors and their design with application to environmental reactions in the air, water and soil. An introduction to the basic concepts of mathematics modeling. The subject matter is directed toward chemical and petroleum engineering design and operation. Development of models which form the framework of a quantitative and scientific approach to technical problems will be followed by analytical and/or numerical solutions to optimize output and profitability.
- 5343 Industrial Waste Treatment** 3:3:0
Procedures for analysis of the industrial waste problem, methods of collecting experimental data and process design for required treatment. Case studies and special laboratory problems for translating experimental data to prototype design. May be repeated for credit when the subject matter varies.

- 5348 Advanced Air Pollution Control** 3:3:0
Air pollution control and design principles; VOC incineration; gas absorption; air pollution and atmospheric dispersion modeling; particulate matter; cyclones, electrostatic precipitators; fabric filters and scrubbers; control of nitrogen oxides and sulfur oxides.
- 5350 Unit Operations of Environmental Engineering** 3:3:0
Theory of fluid and slurry movement under gravity and pressure systems, mixing processes, coagulation and flocculation of chemical treatment, separatory processes including flotation and sedimentation, and gas transfer and absorption of the biological systems. Selected laboratory assignments for model studies of these unit operations.
- 5351 Electric Power Systems Analysis I** 3:3:0
A three-semester sequence, selected from: symmetrical components, impedance and fault-current calculations, load-flow studies, economic operation, stability and control, system modeling, non-fossil fuel energy conversion. Both analytical and digital-computer methods may be employed as appropriate.
- 5360 Introduction to VLSI Design** 3:3:0
Study of the principles of basic microchip design. Use of several CAD tools, with hands-on experience in implementing Very Large Scale Integration (VLSI) circuits. Detailed study and computer simulation of MOS-capacitance models.
- 5361 Computer Hardware Design Languages** 3:3:0
A CAD method of design of digital hardware using Computer Hardware Languages (CHDLs). Implementation of combinational logic units, microprocessors and microprogrammed processors.
- 5362 Fault Diagnosis & Fault Tolerant Design** 3:3:0
Study of several test generation algorithms for combinational circuits such as Boolean Difference, D, PODEM, and FAN Algorithms. Test generation techniques for RAMS and microprocessors. Various methods for Design for testability and Fault Tolerant Design.
- 5364 Digital Hardware Design** 3:3:0
Problem formulation, dependency notation, programmable combinational circuits, designing for maintainability, algorithmic state machines.
Prerequisite: Logical design, or consent of instructor.
- 5366 Advanced Engineering Economy** 3:3:0
Special economic analyses based on risk, uncertainty and other probabilistic considerations. Bayesian attacks, influence of perfect information, competitive decisions and decisions under pressure.
- 5369 Engineering Management** 3:3:0
Transition from engineering to management, decision making responsibilities — a comparison; planning, organizing and staffing in a technical environment, technical project management, team leadership, appraising engineers.
- 5380 Structural Timber Design** 3:3:0
Characteristics of wood as a structural material. Use of standard specifications in the design of connections, beams, and columns. May be repeated for credit when the subject matter varies.
Prerequisite: CE 334
- 5381 Structural Masonry Design** 3:3:0
The design of load-bearing masonry. Specifications for reinforced masonry construction. Building code requirements. May be repeated for credit when the subject matter varies.
Prerequisite: CE 334
- 5382 Structural Dynamics** 3:3:0
Behavior of structures subjected to dynamic loads. Design of structures to resist earthquake and wind forces. May be repeated for credit when the subject matter varies.
Prerequisite: CE 334.
- 5387 Special Topics** 3:3:0
The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Non-linear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers; (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.
- 5390 Special Topics** 3:3:0
The course is designed to meet special needs of students. Each topic is offered on an irregular schedule as the demand requires. Sample topics include: (1) Kinetic theory of gases; (2) Transients in compressible flow; (3) Non-linear vibrations; (4) Protective construction; (5) Transients in engineering systems; (6) Stagewise mass transfer; (7) Nuclear engineering; (8) Hybrid and analog computers (9) Adaptive control; (10) Optimization techniques; (11) Sampling techniques.

- 611 Professional Seminar** 1:1:0
Advanced topics suitable for research along with research procedures will be discussed. Field study organization and content together with doctoral research problems and progress will be presented. Topics will vary each semester and course may be repeated for credit. Registration and completion for three semesters is required of all doctoral candidates.
- 631 Design Projects** 3:A:0
May be repeated for credit when the subject matter varies.
Prerequisite: Admission to candidacy.
- 6313 Digital Filters** 3:3:0
Introduction to digital filtering. Recursive, non-recursive filters and their design. Butterworth, chebyshev filters.
Prerequisite: Proficiency in computer programming.
- 6314 Computer Control and Instrumentation** 3:3:0
Basic Instrumentation principles. Signal acquisition and conditioning. Computer control using digital signal processing techniques in time and frequency domains. Programming project assignments involving implementation of basic instrumentation and computer control methods.
- 632 Justification of Engineering Projects** 3:3:0
The preparation of proposals for advanced engineering work. The student will be given individual assistance in preparing a proposal for his field study.
Prerequisite: Approval of advisory committee.
- 6339 Hazardous Waste Management** 3:3:0
The design, operation and applicability of standard destruction and detoxification technologies will be presented. The various types of incineration, thermal, biological, physical and chemical treatment methods will be included, as well as the technologies now in the later stages of research and development. Emphasis will be on applicability and functional design as opposed to detailed design.
- 6340 Distillation** 3:3:0
Material and energy-balance relationships are reviewed for multicomponent fractionation equipment and for batch stills. Various plate designs are presented from the standpoint of two-phase hydraulics and mass-transfer efficiency.
- 6343 Reactor Design II** 3:3:0
Emphasis is placed on complex reactor design. Attention is devoted to chemical kinetics and catalysis as well as to the engineering aspects of both homogeneous and heterogeneous reactors. Mixing problems are discussed in terms of residence time distribution. The importance of temperature effects is stressed.
Prerequisite: Egr 5345 or equivalent.
- 6344 Multimedia Transport of Pollutants** 3:3:0
Chemical transfer rates between air and water, water and soil/sediment, as well as air and soil. Intraphase pollutant processes in atmosphere, surface water, and ground water. Description of the dispersion model and the meteorological effects on pollutant transport. Discussion of partition to biomass and exposure pathways.
- 6349 Engineering Applications of AI/Expert Systems** 3:3:0
An in-depth study of the effective utilization of Artificial Intelligence/Expert Systems as applied to engineering problems. Projects assigned will involve the design and development of software systems to solve discipline-specific problems using available IE languages and expert system shells.
Prerequisite: Egr 5347.
- 6359 Computer Methods in Statistical Quality Control**
Methods of dealing with Statistical Quality Control problems such as control charts, test, tests of hypothesis, analysis of variance, regression analysis and design of experiments will be employed using one or more software packages. Emphasis will be placed on problem definition, model selection and interpretation of output for decision making and process improvements.
Prerequisite: A course in probability and statistics
- 6361 Solar Energy I** 3:3:0
Origin, nature and availability. Heat transfer considerations. Plate collectors, energy storage and thermal performance are discussed. Applications and experimentation are covered.
Prerequisite: Egr 537 or equivalent.
- 6362 CAD Tools for VLSI Design**
Study of the principles involved in the development of a variety of Computer Aided Tools used in the design of Very Large Scale Integrated circuits. Implementation of the tools with programming assignments.
- 6364 Microcomputer Based Design** 3:3:0
Registers and data manipulation, computer organization, memory, input-output, algorithmic processes. Design Application.
Prerequisite: Logical design, or consent of instructor.
- 6366 Digital Signal Processing** 3:3:0
Study of various digital signal processing techniques in time and in frequency domains. Preprocessing, windowing, correlation techniques, convolution, DFT and FFT. Signal encoding schemes, detection schemes and digital filters. Programming assignments to implement several DSP tools.

- 6368 **Artificial Neural Networks & Fuzzy Logic** 3:3:0
Study of various Artificial Neural Network architectures for real-world applications. Massive parallel computation, fault tolerance and adaptation characteristics. Emphasis on computer simulation of ANN-architectures and their applications.
- 6369 **Computer Methods of Engineering Optimization** 3:3:0
Formulation, solution and implementation of optimization models such as linear programming, dynamic programming, integer programming, quadratic programming, convex programming, geometric programming and unconstrained optimization for analyzing complex systems problems in industry. One or more software packages will be used to execute the algorithms presented throughout the course.
Prerequisite: A graduate course in operations research.
- 6387 **Hydraulics of Environmental Systems** 3:3:0
Hydraulic design of municipal utilities including storm water and waste water collections systems, water distribution networks and treatment plant facilities.
- 6388 **Computer Methods of Engineering Project Management** 3:3:0
Principles governing the effective and efficient management of engineering projects including the application of comprehensive planning, scheduling and cost estimation procedures. Utilization of various computer methods and systems will be emphasized.
- 6389 **Computer-Aided Software Engineering** 3:3:0
Analysis and utilization of computer software to solve engineering design problems. Applications on the CAD/CAG and various other systems will be emphasized.
- 661 **Engineering Practice** 6:A:0
An internship period under personal supervision. Approval must be obtained from the student's graduate committee. Usually, a formal proposal will be required. May be taken for either six or 12 hours credit per semester. Must be repeated for credit until field study is completed. Total credit: six semester hours per section.
- 662 **Engineering Practice** 6:A:0
An internship period under personal supervision. Approval must be obtained from the student's graduate committee. Usually, a formal proposal will be required. May be taken for either six or 12 hours credit per semester. Must be repeated for credit until field study is completed. Total credit: six semester hours per section.
- 6390-6391 **Thesis** 6:A:0
Prerequisite: Approval of graduate advisor.

Department of Computer Science

The Department of Computer Science offers a program of study leading to the Master of Science degree in Computer Science. Both thesis and non-thesis options are available.

The objective of the master's degree is to produce professional computer scientists capable of contributing technically to the basic core areas of computer science as well as to application areas. A mixture of course, laboratory and research work in the program is designed to place graduates at the forefront of technical excellence.

Research

The department has a broad-based research program. Current faculty research interests include parallel and distributed processing, artificial intelligence, data and knowledge bases, computational complexity, visual languages and image processing, operating systems and graphics.

Facilities to support these activities include a mainframe Digital ALPHA machine, a DEC 5100 system configuration with eight DEC Window terminals, a PC network tied to a UNIX server via PC-NFS and a network of TATUNG workstations. Additional support is provided with access to Internet through THENET to Houston. The national high performance computing centers at Cornell University and the University of Pittsburgh provide access to supercomputers such as the CRAY, CM2 and clusters of workstations.

The department enjoys a friendly working relationship with local and national companies. The department's Industrial Advisory Council is composed of representatives from regional/state industries and high-tech firms.

Admission to the Graduate Program

Students seeking admission to this program must meet all general requirements of the College of Graduate studies as listed in the Bulletin of the College. Additional requirements are as follows:

1. In most cases, a student must have a minimum combined score of 1000 on the Verbal and Quantitative sections of the GRE and a minimum grade point average of 3.0 on the last 60 hours of undergraduate course work.
2. A ranking in the 34th percentile of the verbal portion of the GRE; for applicants whose native language is not English, a TOEFL score of at least 550 also is required;
3. Completion of a sufficient amount of prior work in the field of computer science including courses such as CS 2313, CS 3303 or CIS 335, CS 3306, CIS 331 or CS/EE 3305, CS 4302, CIS 434 and CS 4307 or CS 3302 or equivalents; undergraduate and graduate leveling sequences are available (CS 5341 and CS 5342 have been designed for students who satisfy conditions 1 and 2 but are deficient in computer science course background);
4. Students with minor deficiencies may be admitted to the program if these deficiencies can be removed within approximately one long semester. However, major deficiencies must be removed before a student is admitted to the degree program; and
5. At least 15 hours of mathematics including differential and integral calculus, discrete mathematics and two other courses selected from statistics, linear algebra, abstract algebra, numerical analysis and differential equations.

Students not satisfying both conditions 1 and 2 will not be admitted to the computer science program nor will they be allowed to enroll in graduate computer science courses. Those students who satisfy both conditions 1 and 2 but who are deficient in other areas may be provisionally admitted to the program and may enroll in graduate-level courses.

Admission to Candidacy

After removal of all deficiencies and upon completion of an additional 12 hours of graduate credit, the student is required to submit a formal degree plan to the computer science graduate adviser and the dean of the Graduate School. Failure to fulfill this requirement may prevent the student from enrolling the following semester.

Admission to candidacy is granted by the dean of the Graduate School after the degree plan has been approved.

Degree Requirements

A. Core Course Requirement (6 courses; 16 semester hours)

Students in the masters program in Computer Science are required to establish competence in several areas considered basic to the field of Computer Science. At least 28 hours of graduate work in computer science, including the thesis or project, are required for a masters degree in Computer Science. The degree includes two specialization areas in computing (6 to 9 hours per specialization) chosen by the student together with the academic adviser. (Specialization Areas are listed below. One of these areas of specialization may be an area of computer applications outside of the department. In order to qualify for the master's degree, the student must earn a grade of B or better in each of the core courses. The Core Requirement consists of the indicated number of courses in each field listed below.

Number of Courses	Area of Computer Science	Courses
1	Graduate Seminar	CS 5100
1	Analysis of Algorithms	CS 5313
1	Operating Systems	CS 5302
1	Distributed Systems	CS 5328
2	Languages & Computation Theory	CS 5319 and CS 5320 and CS 5330 and CS 5339

B. Option I (Thesis)

1. Completion of the core requirements.
2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the computer science course listings in the catalog. At least a "B" (3.0) average must be maintained in the specialization areas. One "C" is permitted in these areas combined if it is balanced by an "A" in one other graduate level course.
3. Completion of CS 669A and 669B and submission of an acceptable thesis.
4. Completion of a total of 34 graduate semester hours.
5. Successful oral defense of the thesis. If failure occurs, the defense may be repeated. A second failure will cause the student to be dropped from the degree program in Computer Science.

C. Option II (Non-thesis)

1. Completion of the core requirement.
2. Completion of two areas of computer specialization. Specializations outside of the area of computer science are chosen by the student under the guidance of the student adviser from the restricted list of courses at the end of the course listings in the catalog. At least a "B" (3.0) average must be maintained in the specialization areas. One "C" is permitted in these areas combined if it is balanced by an "A" in one other graduate level course.
3. All non-thesis students must take and satisfactorily complete CS 5369. This course consists primarily of a significant research project and the submission of a written professional report.
4. Completion of a total of 37 hours in graduate level courses.
5. Successful completion of an eight hour comprehensive examination, which may be written, oral, or a combination of both upon determination of the Computer Science faculty. This comprehensive exam will cover the four core areas and will also include a programming component. Materials to help the student prepare for the comprehensive examination will be posted in the departmental office at least one month prior to the scheduled testing time. Failure to pass this examination in two attempts will result in the student being dropped from the degree program in Computer Science. Additionally a separate programming component of the comprehensive examination must be passed.

COMPUTER SCIENCE SPECIALIZATION AREAS:

<u>Area</u>	<u>Courses</u>
Artificial Intelligence	CIS 435G, CIS 437G, CS 5312, CS 5318
Graphics	CIS 433G, CS 4319G, CS 5335, CS 5339
Simulation/Modeling	CS 4309G, CS 5336, CS 5402
Software Engineering	CIS 436G, CS 5331
Database	CIS 434G, CS 5311, CS 5332, CS 5333
Architecture/Algorithms	CS 4310G, CS 5310, CS 5350, CS 5313

Graduate Record Exam (GRE) – Advanced Computer Science Section:

Students are expected to submit scores from the advanced Computer Science section of the Graduate Record Examination during their last semester of course work toward the degree.

Course Credit for 400G classes

No more than 6 hours of senior-level courses may be included in the CS graduate degree program; if a student wishes to include such courses in the degree plan, prior approval of the department must be obtained. CS 5341 and CS 5342 may not be included.

Academic Standards

If a student's GPA on all graduate and/or deficiency courses falls below 3.0, the student will be placed on probation the following semester. Students who cannot raise their GPA above 3.0 during that semester will be dropped from the program.

Computer Science Courses

- 5100 Graduate Seminar** 1:1:0
 Topics include the scientific method and research process, library utilization and components and organization of various types of research papers. Writing exercises on the latter topics. Preparation, formal written report and presentation on a research topic.
Prerequisite: Admission to the M.S. program in Computer Science. Pass/NoPass only.
- 5302 Advanced Topics in Operating System** 3:3:0
 Current research issues and advanced topics involving both the principles and pragmatics of operating systems specification, design and implementation. Study of concurrent processes, support structures for modular programming, resource allocation and protection, telecommunications, networks and distributed processing.
Prerequisite: CS 4302 or equivalent.
- 5310 Advanced Topics in Computer Architecture** 3:3:0
 Advanced topics in computer architecture such as RISC vs CISC, pipelined processors, vector processors, HDLs, language directed architectures and neural nets.
Prerequisite: CS 4310 or equivalent.
- 5311 Advanced Topics in Database Design** 3:3:0
 Data models, distributed databases, special databases, statistical databases, database machines, knowledge bases, database design theory and self-documenting databases.
Prerequisite: CS 4304G and CS 5328 or equivalent.

- 5312 Advanced Topics in Artificial Intelligence** 3:3:0
 Topics include, but are not limited to, knowledge representation, distributed cooperative AI, intelligent tutoring systems and semantic representation in natural language processing.
Prerequisite: CIS 435G or CIS 437G or equivalent.
- 5313 Analysis of Algorithms** 3:3:3
 Topics on what can and cannot be proven about computational complexity including algorithm design methodologies.
Prerequisite: CS 3302 or CS 4307 or equivalent.
- 5318 Design and Implementation of Expert Systems** 3:3:0
 Problems in knowledge acquisition, knowledge representation issues, representation of meta-knowledge, use of statistical measures to limit search of the knowledge base, and knowledge verification.
Prerequisite: CIS 435G or CIS 437G or equivalent.
- 5319 Advanced Topics in Compiler Construction** 3:3:0
 An introduction to the major methods used in compiler implementation. The parsing methods of LL(k) and LR(k) are covered as well as finite state methods for lexical analysis, symbol table construction, internal forms for a program, run time storage management for block structured languages and an introduction to code optimization.
Prerequisite: CS 4307 or CS 3302 or equivalent.
- 5320 Formal Methods in Programming Languages** 3:3:0
 Data and control abstractions are considered. Advanced control constructs including backtracking and non-determinism are covered. The affects of formal methods for program description are explained. The major methods for proving programs correct are described.
Prerequisite: CS 4307 or CS 3302 or equivalent.
- 5328 Computer Communication Networks and Distributed Processing** 3:3:0
 A study of networks of interacting computers. The problems, rationales and possible solutions for distributed databases will be examined. Major national and international protocols including SNA, S.21 and X.25 will be presented.
Prerequisite: (CIS 331 or CS/EE 3305), CS 3306, and CS 4302 or equivalent.
- 5330 Advanced Topics in the Theory of Computation** 3:3:0
 A survey of formal models for computation. Includes Turing Machines, partial recursive functions, recursive and recursively enumerable sets, and the recursive theorem, abstract complexity theory, program schemes and concrete complexity.
Prerequisite: CS 3302 or CS 4307 or equivalent.
- 5331 Advanced Software Engineering** 3:3:0
 Topics not limited to software development methodology, verification and reliability, software quality assurance and productivity, software engineering economics, models and metrics for software management and engineering, human performance engineering and software configuration management and control.
Prerequisite: CIS 436G or equivalent.
- 5332 Object Oriented Database Management Systems** 3:3:0
 Introduction to object oriented databases. Topics including introduction to object oriented programming via SMALLTALK, the object-oriented data model, interface for defining and manipulating object oriented databases and other databases. Semantics and changes to the schema, query model, authorization model, architecture and implementation issues. Survey of current object oriented database systems: Versant, ORION, Gemstone, ONTOS, 02, and POSTGRES.
Prerequisite: CIS 434G and CS 5328 or equivalent.
- 5333 Distributed Computer Systems** 3:3:0
 Design of local area networks and multiple network systems, data bases, programming languages and operating systems for distributed systems, fault-tolerance, simulation and modeling of distributed systems.
Prerequisite: CS 5328 and CIS 434G or equivalent.
- 5335 Advanced Topics in Computer Graphics** 3:3:0
 The course focuses on topics current to the field and includes, but is not limited to, areas such as design and construction of computer graphics systems both software and hardware, the theory and use of color and shading and algorithms for solid object modeling.
Prerequisite: CS 4319G or CIS 433G or equivalent.
- 5336 Advanced Simulation and Modeling** 3:3:0
 Current topics in both simulation methodology and applications. Distributed simulation, simulation support tools, object oriented simulation and artificial intelligence and simulation.
Prerequisite: CS 4309G, (MTH 234 or MTH 3370), and MTH 149 or equivalent.

- 5339 Visual Languages** 3:3:0
Languages for indexing and retrieving images such as motion pictures, satellites, video images, etc. Iconic representation, pattern matching algorithms, visualization of images, object oriented databases, semantic data modeling, icon systems query processing, image compression and architecture for query processing.
Prerequisite: (CS 4319G or CIS 433G) and CS 5328 or equivalent.
- 5340 Special Topics** 3:3:0
Special topics in all areas of Computer Science with emphasis on topics not covered in other courses. May be repeated for credit when topics vary.
Prerequisite: consent of department chair.
- 5341 Problem Solving in High-Level Language/Data Structures** 3:3:0
Algorithms, pseudocode, structured techniques of problem solving and program design using high-level programming languages. Data sorting and searching techniques, data structures in programming languages and recursion versus iteration.
Prerequisite: A first programming language, MTH 1345, and MTH 234 or MTH 3370. Leveling course not for graduate credit in MSCS degree.
- 5342 System Design and Programming** 3:3:0
Principles of computer systems analysis and design, system hardware and software characteristics. Data representation and programming in assembly language. Computer storage structures, storage allocation and management. Design of typical system programs such as assemblers, compilers and operating systems, addressing techniques and core management, file system design and management.
Prerequisite: CS 5341. Leveling course not for graduate credit in MSCS degree.
- 5350 Parallel Programming and Algorithms** 3:3:0
Taxonomy of parallel computers, shared-memory vs. message-passing architectures, theoretical models, parallel algorithm design strategies, parallel data structures, automatic parallelization of sequential programs, communication, synchronization and granularity.
Prerequisite: CS 5313 or equivalent.
- 5369 Graduate Project** 3:3:0
Independent study and research of a specific problem in a field of computer science or its application. A report is required defining the problem and developing a solution. The work may be supervised by any member of the graduate faculty.
Prerequisite: 10 hours of graduate computer science credit including CS 5100 with grades of A or B; prior approval of written plan by the faculty supervisor and by the computer science department chair. May not be repeated for credit.
- 5402 Pattern Recognition and Image Processing** 4:3:3
Principles and pragmatics of pattern recognition, digital image processing and analysis. Statistical pattern recognition: complete vs. incomplete approach (via supervised vs. unsupervised learning). Structural pattern recognition. Image processing: image acquisition and digitization, making decisions based upon the available features. Image segmentation (by clustering, textured images, range images and multispectral images) and registration.
Prerequisite: CS 4309G and MTH 234 or equivalent.
- 6390-6391 Thesis** 3:3:0
Independent research of a specific problem in a field of computer science. The work will be supervised by a member of the graduate faculty of the Computer Science Department. To be scheduled only with the consent of the department. 6 hours credit required. No credit assigned until thesis has been completed and filed with the graduate dean. Continuous enrollment required once work on thesis has begun.
Prerequisite: Consent of Department Chair.

Computer Information Sciences (CIS) 500 Courses

- 533 Advanced Topics in Multimedia Processing** 3:3:0
Television style viewing and sound interfacing to computer systems. Software and architectural interconnection requirements of digital interactive video and audio technology. Graphical user interface (X-Windows). Definition, examples, application, review of major implementations, and architecture of hypertext systems. Voice technology: synthesis, recognition and response. Student projects.
Prerequisite: CIS 433.
- 535 Advanced Topics in Applications of Expert** 3:3:0
Theory and programming of expert systems. Introduction to expert systems. Introduction to a particular expert system, pattern matching, control techniques, efficiency in rule-based language, and expert system examples. A student term project is assigned.
Prerequisite: CIS 435.

536 Advanced Topics in Software Engineering

3:3:0

Systems analysis, software requirements analysis and definition, specification techniques, software design methodologies, performance measurement, validation and verification and quality assurance techniques. Programming in ADA.

Prerequisite: CIS 436.

OTHER ACCEPTED GRADUATE COURSES

The following list of graduate level engineering, business, psychology and English courses may be taken for graduate credit, for satisfying the specialization area requirements, subject to the approval by the graduate advisor. Course descriptions may be found in the Catalog of Lamar University, or in this Catalog.

Mth 5310	Numerical Analysis	OAS 530	Administrative Communications
Egr 5303	Regression Analysis	Fin 530	Foundations of Finance
Egr 5305	Reliability	BAC 531	Advanced Statistical Theory and Analysis for Business
Egr 5319	Design of Experiments		
Egr 5321	Quality Control Systems	Eco 530	Foundations of Economics
Egr 5332	Operations Research II	Mgt 530	Foundations of Management
Egr 6348	CAD Applications		
Egr 539	CAD	Mgt 535	Management of Technology Transfer
Egr 5336	Operations Research III	Mkt 530	Marketing Concepts
Egr 5364	Digital Hardware Design	Bac 533	Business Forecasting
Egr 6364	Microcomputer Based Design	Psy 5321	Advanced Industrial Psychology I
Acc 530	Financial Accounting: Concepts and Procedures	Psy 5322	Advanced Industrial Psychology II
BLW 530	The Legal Environment of Business		
Mgt 531	Operations Management and Information Systems		

Department of Mathematics

The Department of Mathematics offers a program of study leading to the Master of Science degree in Mathematics. It is designed to train students either for a professionally oriented career in industry or in government, for further graduate work in mathematics or to provide depth and breadth in Mathematics Education.

Opportunities in the areas listed above, for students with a Master of Science in Mathematics, are numerous. Such opportunities exist in all areas of applied mathematics including computer science, statistics, operations research, numerical analysis, mathematical physics, administration/management science, engineering, secondary and elementary school teaching. These supporting areas are just a sample of excellent job opportunities for the graduate.

The department spends considerable time advising students in the Master's program. Once a student is admitted, the student's advisor will individually tailor the student's program to meet the needs of the supporting areas mentioned above or other areas of interest to the student. Consequently, students with a Bachelor's degree in Mathematics, Computer Science, Engineering, any of the sciences or Secondary Education will find

appropriate opportunities in this M.S. program. Students will find a wide variety of courses listed in the program to make the above supporting areas available to them.

Those seeking admission to this program must satisfy the requirements as indicated below:

Admission to the Program

In order to be admitted to the Graduate Degree Program, a student must

1. Meet the general requirements as set forth in this catalog for admission to the College of Graduate Studies.
2. Successfully complete 27 semester hours of undergraduate mathematics including courses equivalent or comparable to the following: linear algebra, differential equations, advanced calculus, modern algebra and statistics.

Final approval as to what course work is acceptable toward admission to the graduate degree program lies with the graduate advisor and the department head. A student may be admitted conditionally to the graduate degree program, but is required to remove any deficiencies in undergraduate mathematics.

Admission to Candidacy

In order to be admitted to candidacy a student must

1. Successfully complete 12 semester hours of approved graduate work in mathematics.
2. Remove all deficiencies in mathematics designated by the Graduate Advisor and the Department Chair.
3. Satisfy the general Admission to Candidacy requirements as set forth in this catalog.

Completion of the Program

In order to complete the M.S. program a student must

1. Take the Advanced Mathematics section of the Graduate Record Examination and have the score reported to the Graduate Advisor.
2. Complete one of the two following programs:
 - a. Complete at least 24 hours of graduate course work, write a thesis acceptable to the student's graduate committee, and satisfactorily defend the thesis orally before the graduate committee.
 - b. Complete at least 36 hours of graduate course work and satisfactorily complete an examination over the course work before the student's graduate committee.
3. Include at least three courses from among the following:

Mth 531	Theory of Functions of Real Variables
Mth 532	Modern Algebra
Mth 534	Topology
Mth 5311	Complex Variables or 431G Complex Variables

Mathematics Courses (Mth)

- 531 **Theory of Functions of Real Variables** 3:3:0
 Analytical functions, pathological functions, set functions, Riemann integral, measure theory, Lebesgue integral, Reimann-Stieltjes and Lebesgue-Stieltjes integral.
Prerequisite: Graduate standing and Mathematics 338.

532	Modern Algebra Groups, rings and the theory of fields. The theory of fields includes the study of subfields, prime fields, algebraic fields extensions and Galois fields. <i>Prerequisite: Graduate standing and Mathematics 335 or its equivalent.</i>	3:3:0
534	Topology Topological spaces, metric spaces, compact spaces, embedding, Urysohn's lemma and homotopy. <i>Prerequisite: Graduate standing and Mathematics 338.</i>	3:3:0
537	Methods of Applied Mathematics The Dirichlet problem, solution of boundary value problems, the Bergman Kernel function, method of the minimum integral, applications of conformal mapping. <i>Prerequisite: Graduate standing and Mathematics 431.</i>	3:3:0
5303	Modeling Theory Study of techniques of building and applying mathematical models. Applications in biology, ecology, economics and sociology. <i>Prerequisite: Graduate standing and Mathematics 331 or 3301.</i>	3:3:0
5304	Functional Analysis Study of linear topological spaces, convexity, Hilbert spaces, Banach spaces, applications. <i>Prerequisite: Graduate standing and Mathematics 338.</i>	3:3:0
5310	Numerical Analysis Solutions of ordinary and partial differential equations, approximation of functions, quadrature, and splines. <i>Prerequisite: Graduate standing, Mathematics 4315 or its equivalent, and some knowledge of computer programming.</i>	3:3:0
5311	Complex Variables Conformal mapping and analytic continuation, calculus of residues, and applications. <i>Prerequisite: Graduate standing and Mathematics 431 or its equivalent.</i>	3:3:0
5330	Enrichment Topics in Mathematics A potpourri of important mathematical ideas not normally covered in other courses. <i>Prerequisite: Graduate standing and Mathematics 335 or 338.</i>	3:3:0
5331	Special Topics Advanced topics in mathematics to suit the needs of individual students. Course may be repeated for a maximum of six semester hours credit when the topic varies. <i>Prerequisite: Graduate standing and consent of instructor.</i>	3:3:0
5335	Topics in Mathematics Topics include Mathematical Logic, Group Theory, Field Theory, Approximation and Interpolation, Game Theory and Calculus of Variations. <i>Prerequisite: Graduate standing and consent of instructor.</i>	3:3:0
6390-6391	Thesis <i>Prerequisite: Approval of graduate advisor.</i>	6:A:0

The following 500 level engineering courses are also applicable to the Master of Science degree in Mathematics when approved by the departmental graduate advisor.

Egr 5303 Regression Analysis
Egr 5305 Reliability
Egr 5316 Operations Research
Egr 5319 Design of Experiments

College of Fine Arts and Communication

The College of Fine Arts and Communication offers programs of study leading to the Master of Arts degree in Visual Art, with either a Studio Art or Art History emphasis; a Master of Science Degree in Audiology/Speech-Language Pathology; a Master of Science Degree in Deaf Studies/Habilitation; a Master of Music Degree; a Master of Music Education Degree; and a Doctor of Education Degree in Deaf Education. The college also supports some Master of Education degrees with courses from the Department of Art. Persons seeking admissions to these programs must meet the requirements specified by the College of Graduate Studies and the individual department. Admission to a degree program is not an admission to candidacy. Each master's degree program is designed to help students deepen and expand their knowledge and provide them with the opportunity to develop skills and concepts which may be applied to the professional objectives associated with their fields of study. The Doctor of Education in Deaf Education degree program is designed to prepare professionals to serve in leadership positions in the administration of schools and service programs for the deaf/hearing impaired and/or as faculty for universities with Deaf Education training programs.

Department of Art

The Department of Art offers a Master of Arts in Visual Art with an emphasis in either Studio Art or Art History. The Studio Art emphasis offers focused study opportunities in one of eight studio areas. Graduate studios are available. Of particular note, the Art History emphasis offers hands-on research opportunities working with the 19th-century academic paintings housed in the Eisenstadt collection. Part of the permanent holdings of the Dishman Art Gallery, the Eisenstadt collection features works by the American landscapist Thomas Moran and the English portraitist Sir Thomas Lawrence. Both study options provide students with the opportunity to focus and develop skills and abilities in a selected area of study.

Students seeking admission to the degree program must meet the general requirements for admission outlined in this bulletin.

Degree Requirements

Studio Art Emphasis

The Master of Arts degree in Visual Art with a studio art emphasis requires 36 semester hours including 15 hours in the area of specialization, 9 hours of core courses, 6 hours of electives, and 6 hours of thesis. Specialization may be in Ceramics, Drawing, Painting, Photography, Printmaking, Sculpture, or Visual Design and Electronic Media. The core program for studio art includes 3 hours of Art History, 3 hours of Seminar in Art History (5318), and 3 hours of Current Issues and Trends (5301).

Applicants to the degree program in studio art must submit a slide portfolio of 15 works, three letters of recommendation from undergraduate professors, and a letter of intent stating professional objectives to the Department of Art. The slide portfolio should demonstrate competency in the medium of specialization they intend to pursue for the degree. A graduate faculty committee will review applications and portfolios. Applicants will be accepted according to the quality and maturity of the submitted work. Undergraduate course work may be required if the applicant has not earned a Bachelor of Fine Arts degree and/or the entrance portfolio does not demonstrate the knowledge, skills and abilities prerequisite to successful graduate study.

Art History Emphasis

The Master of Arts degree in Visual Art with an art history emphasis requires 36 semester hours of graduate study including 15 hours in art history, 9 hours of core courses, 6 hours of electives, and 6 hours for writing and defending a thesis. All graduate study must be within the areas of specialization offered by the program. Methodology of Art History (Art 5308) and reading competency in an approved foreign language to be determined by examination or course work will be required. Graduate courses in the literature of a foreign language, history, or English can be taken as electives and may be required.

Applicants to the degree program with an art history emphasis must submit undergraduate transcripts, a term paper indicating research and writing skills, and three letters of recommendation from undergraduate professors. A graduate faculty committee will review applications and may require undergraduate foundation courses in art history or research methods before admitting the applicant.

Graduate Faculty

Associate Professor Lynne Lokensgard
Art History
Associate Professor Phil Fitzpatrick
Visual Media
Associate Professor Donna M. Meeks
Studio

Professor Jerry Newman
Studio
Associate Professor Meredith Jack
Studio
Wallis Chair/Professor Keith Carter
Visual and Performing Arts

Art Courses

The following graduate courses may also be taken to satisfy the specialization area requirements of some Master of Education degree programs.

- | | | |
|-------------|--|--------------|
| 5301 | Issues and Trends in Contemporary Art | 3:3:0 |
| | A paradigm study of current values, practices and beliefs of the art profession. Exploration of the origins and directions of artistic thought in the 20th century with emphasis on the interaction between the artist and society, the effects of that contact on artistic expression and the nature of the imagery that results from that contact. | |
| 5305 | Problems in Photography | 3:3:3 |
| | Advanced research in photographic technique and photography as an art medium. May be repeated for credit. | |
| 5308 | Methodology in Art History | 3:3:0 |
| | Introduction to methods of art historical research. Special research projects will be required. | |
| 5318 | Seminar in Art History, Art Criticism and Aesthetics | 3:3:0 |
| | Topical research in a variety of subjects from the areas of Art History, Criticism and Aesthetics. May be repeated for credit. | |
| 5323 | Problems in Visual Media | 3:3:3 |
| | Experimental research in the uses of computers as image making tools. Development of personal imagery through electronic media. May be repeated for credit. | |
| 5325 | Problems in Drawing | 3:3:3 |
| | Independent directed study in drawing. May be repeated for credit. | |
| 5326 | Problems in Painting | 3:3:3 |
| | Directed independent research leading to the development of a personal direction and statement within painting. May be repeated for credit. | |
| 5328 | Nineteenth Century Symbolist Art | 3:3:0 |
| | A study of the Symbolist Movement in European art from 1885-1910. A graduate research project or paper will be required. | |
| 5335 | Problems in Crafts | 3:3:0 |
| | Independent research and experiment in the area of crafts. Topics vary by semester. May be repeated for credit. | |
| 5338 | Renaissance Art | 3:3:0 |
| | A study of Renaissance art in Europe from the 14th through the 16th centuries. A graduate research project or paper will be required. | |

- 5348 Nineteenth Century European Art** 3:3:0
A study of the foundations of abstractionism from Neo-Classicism through Post-Impressionism. A graduate research project or paper will be required.
- 5358 American Art** 3:3:0
A study of the development of art in the United States from Colonial times to the present. A graduate research project or paper will be required.
- 5365 Problems in Printmaking** 3:3:3
Independent research and experiment in methods of printmaking. May be repeated for credit.
- 5368 Contemporary Art** 3:3:0
A critical and historical analysis of painting from 1900 to the present. A graduate research project or paper will be required.
- 5378 Primitive Art** 3:3:0
A study of pre-historic and contemporary tribal art. A graduate research project or paper will be required.
- 5385 Problems in Sculpture** 3:3:3
Independent research and experimentation towards the development of a personal direction and statement in sculpture. May be repeated for credit.
- 5386 Problems in Ceramics** 3:3:3
Independent research and experimentation with technical and aesthetic issues in ceramics. May be repeated for credit.
- 5388 Modern Architecture and Sculpture** 3:3:0
A study of the development of modern architecture and sculpture from the late nineteenth century to the present. A graduate research project or paper will be required.
- 5391 Directed Individual Study in Art History** 3:3:0
Graduate research in a specialized area of art history. May be repeated for credit.
Prerequisite: Permission of instructor.
- 5395 Directed Individual Study in Studio Art** 3:3:3
Individual study at the graduate level of a specific area within the visual arts field. May be repeated for credit when the subject varies.
- 5398 History of Photography** 3:3:0
A study of the development and evolution of photography from its invention in 1839 to the present. A graduate research project or paper will be required.
- 6390-6391 Thesis**
Course requirements listed under Thesis Requirements in this catalog.

Department of Communication Disorders

The Department of Communication Disorders offers training in three disciplines: audiology, deaf education, and speech-language pathology. At the graduate level, Master of Science degrees are available in audiology/speech-language pathology and in deaf studies/habilitation. In addition, a Doctor of Education Degree is offered in deaf education.

Master of Science Degree in Audiology/Speech-Language Pathology

Lamar University programs in audiology and in speech-language pathology hold national certification by the American Speech-Language-Hearing Association (ASHA). Students completing master's degrees in audiology or speech-language pathology typically meet the national certification standards of ASHA as well as requirements for state licensure. Speech-language pathology graduates who meet ASHA and state certification standards are also considered eligible for employment as speech-language pathologists in public schools. Depending on the student's undergraduate program of study, the typical 36 semester hour master's degree may need to be expanded to accommodate ASHA certification and state licensure. Audiology and speech-language pathology students must complete a minimum of 375 hours of supervised clinical practicum, part of which may be accumulated at the undergraduate level.

Graduates may apply to ASHA for the Certificate of Clinical Competence (CCC) in speech-language pathology or in audiology. These national certifications require the completion of specified course work and clinical practice. Students seeking ASHA certification should obtain a copy of ASHA regulations from a faculty advisor early in their training program.

ASHA standards mandate the passing of national qualifying boards examinations for prospective audiologists and speech-language pathologists. These examinations are typically taken by master's students during their final semester. With the approval of their graduate committee, students who pass the ASHA national boards may be exempt from master's oral and/or written comprehensive examinations.

Master of Science Degree in Deaf Studies/Habilitation

Our deaf education program is certified by the national Council on Education of the Deaf (CED) and our graduates are eligible for professional certification through that accrediting agency. In addition, graduates may apply for state certification as a teacher of deaf children. The program welcomes deaf graduate students and many of our faculty are themselves deaf. Program graduates are expected to be skilled in sign language and to have completed a minimum of 300 hours of supervised practicum with deaf children.

Doctor of Education Degree in Deaf Education

Lamar University is one of only nine universities in the U.S. offering a doctoral degree in deaf education and addresses a critical national and international shortage of doctorally-trained educators of the deaf. Graduates of the doctoral program will take leadership positions in schools for deaf children or become teacher trainers in university settings. Both deaf and hearing applicants are accepted.

Admission

Except for prospective students who are deaf, applicants for admission to master's degree programs in the Department of Communication Disorders must obtain a GRE minimum score of 950 (verbal + quantitative) with neither of the two segments of the test being less than 425. Other factors considered for admission include undergraduate GPA, relevance of undergraduate training, and letters of support. Particularly in audiology and speech-language pathology, the number of graduate students admitted each semester may be constrained by national certification standards which mandate a low faculty-to-student ratio.

Applicants for the doctoral program in deaf education must have a master's degree in deaf education or a related field and have completed three years of professional experience with hearing-impaired children and/or adults. Hearing applicants must have a GRE verbal + quantitative minimum of 1100 (500 minimum for each subtest).

Deaf applicants for the master's and doctoral degrees in deaf education who have a severe to profound hearing loss acquired congenitally or prelingually will be considered on an individual basis and need not submit GRE scores. Deaf applicants must submit above-average performance intelligence scores (preferably the performance scale of the WAIS-R) and university grades, pass an interview with our deaf education faculty, and demonstrate adequate literacy and communication skills for graduate training. Literacy in this case includes both the reading and writing of English, but not necessarily equivalent to hearing norms. Communication skill may be demonstrated in speech and/or sign.

Graduate Faculty

<p>Professor Jean Andrews Deaf Education</p> <p>Assistant Professor Michael Bienenstock Deaf Education</p> <p>Associate Professor Randolph Deal Speech Language Pathology</p> <p>Instructor Mary Dobson Speech Language Pathology</p> <p>Assistant Professor Thomas C. Franklin Audiology</p> <p>Instructor Ramon Gonzales Deaf Education</p>	<p>Instructor LaVae Hoffman Speech Language Pathology</p> <p>Associate Professor Gabriel A. Martin Deaf Education</p> <p>Professor Robert D. Moulton Deaf Education, Speech Pathology</p> <p>Assistant Professor Usharani Pannappalli Audiology</p> <p>Instructor Annette Powell Speech Language Pathology</p> <p>Assistant Professor Marshall Smith Audiology</p>
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Communication Disorders Courses (SPC)

530	Neurology Anatomy, physiology and neurobiology of the human nervous system.	3:3:A
5301	Aphasia and Neurogenic Disorders Theory and treatment for organic speech disorders of neurologic origin.	3:3:0
5302	Stuttering Nature, evaluation and treatment of fluency disorders.	3:3:0
5303	Voice Disorders Functional and organic voice disorders and treatment.	3:3:0
5304	Communication Disorders of the Severely Handicapped Nature, evaluation and treatment of speech and language disorders of the severely impaired.	3:3:0
5305	Diagnostics and Counseling Evaluation and counseling procedures in communication disorders.	3:3:0
5306	Children's Language Disorders Assessment and intervention procedures for preschool and school age children with language disorders.	3:3:0
5307	Articulation Disorders Nature, evaluation, and treatment of articulation disorders.	3:3:0
5308	Communication Disorders and the Aging Process The normal process of aging and the associated problems including speech, hearing and language disorders.	3:3:0
5309	Advanced Clinical Practicum Advanced classroom practicum, diagnostics and therapy. May be repeated and must be taken each semester.	3:3:10
5311	Contemporary Issues in Deaf Education Classrooms A research review on curricular issues in teaching deaf children.	3:3:0
5312	Sign Language IV Advanced linguistical studies of American Sign Language.	3:3:0
5313	Speech Development in the Hearing Impaired Speech for the young hearing impaired child, home training and therapy.	3:3:0
5316	Language for the Deaf Language development theories applied to deaf children.	3:3:0
5317	Advanced Language for the Deaf Language development and correction in the older deaf child and adults.	3:3:0
5318	Special Audiometric Tests Test batteries for peripheral vs. central site of lesion, non-organicity, electrophysiological assessment.	3:3:0
5319	Bone Conduction and Masking Test procedures for determining individual ear status, includes impedance audiometry.	3:3:0
5320	Pediatric Audiology Hearing evaluation in the young patient, method and theory.	3:3:0
5322	Medical Audiology Study of otologic pathology and influence upon auditory/vestibular systems.	3:3:0

5323	Electrophysical Assessment of Hearing Current electrophysiological auditory assessment: includes theory, instrument, techniques and procedures.	3:3:0
5324	Advanced Hearing Aids Pros and cons of amplification theory and practicum.	3:3:0
5326	Psychology of Deafness Psychological, emotional, and social impact of deafness.	3:3:0
5327	Advanced Auditory Rehabilitation Speechreading, auditory training, amplification and counseling for the aurally impaired.	3:3:0
5328	The Multidisabled with Hearing Disorders Prevalence, demographics and etiologies of hearing disorders with other disabilities (blindness, motor, emotional, mental, or orthopedic). Includes methods, curricula, and material assistance.	3:3:0
5329	Law and Deafness Legislative and judicial decisions that influence educational programs for the hearing impaired/deaf.	3:3:0
535	Individual Study Independent study of special problems in disorders of communication. May be repeated once for credit.	3:A:0
5350	Individual Study Independent study of special problems in speech and hearing disorders under faculty guidance.	3:A:0
6390-6391	Thesis <i>Prerequisite: Approval of Graduate Advisor.</i>	6:A:0

Doctoral Core Courses

6301	History & Sociology of Deaf Culture Life/culture of deaf people via history, art, literature, mythology, and performance. Using an anthropological definition of "culture", the course examines the linguistic variations and modes of cultural transmission across generations and the demographics and characteristics of the community.	3:3:0
6302	Law and Deafness Legislative and judicial decisions that influence educational programs for the hearing-impaired/deaf.	3:3:0
6303	Vocational Rehabilitation and Deafness The vocational & rehabilitative needs of deaf/hard-of-hearing persons and successful programming models with emphasis on federal & state laws for rights & services for deaf/hard-of-hearing individuals.	3:3:0
6304	Curriculum, Pedagogy, and Computers used with Deafness Comparative analysis, design, and implementation of educational curricula for deaf/hard-of-hearing students, the curricular relation to current pedagogical theories, and the utilization of computer technologies for the deaf education classroom.	3:3:0
6305	Psycholinguistics/Linguistics and Deafness The psycholinguistics and linguistic development of deaf children of various linguistic and cultural backgrounds and the effects of communication modality differences upon development. Emphasis upon the bilingual/bicultural nature of these acquisition patterns will be included.	3:3:0
6307	Field Studies/Deaf Education Administration Professional placement of the doctoral candidate in educational/administrative locations for field experience and a seminar including problem-project discussion on issues of deaf education program management.	3:3:0
6308	Cognition, Intelligence, Psychosocial Development and Deafness Historical review of the way intellectual abilities of the deaf were viewed, current data on cognitive and intellectual abilities, psycho-social development of deaf persons and appropriate assessment tools will be covered.	3:3:0
6309	Contemporary Aural Rehabilitation & The Deaf/Hard-of-Hearing Amplification, acoustics, and habilitative techniques and procedures applicable to deaf educational settings and the deaf/hard-of-hearing.	3:3:0

Additional hours are required in Statistics/Research as well as Cognate areas and Electives to meet full doctoral hour requirements (60 hours total).

Department of Music and Theatre

The Department of Music offers the following graduate degrees: the Master of Music in Performance, the Master of Music Education, and the Master of Science in Theatre. The Music degrees are designed to help performers and music educators improve skills and develop new concepts which may be applied to their particular fields of endeavor. Persons seeking admission to these degree programs must meet the general requirements for admission which are outlined elsewhere in this catalog. Generally, an applicant must also hold a bachelor's degree in music.

Students who did not graduate from Lamar University must take a music theory placement examination. Applicants for the graduate degree in performance must audition for the major professor.

The Master of Science in Theatre is designed to help performers and technicians increase their skills and study new concepts in their perspective specialization. Persons seeking admission to this degree must meet the general admission requirements as outlined elsewhere in this catalog. It is necessary for an applicant to hold a bachelor's degree in theatre or a compatible field.

Music Degree Requirements

Candidates for master's degrees in music must meet all general degree requirements of the College of Graduate Studies as listed elsewhere in this catalog. The Master of Music in Performance requires 30 semester hours, including 12 hours in the applied major, six in music literature, six in music theory, and six in music education. In addition, a public recital and research paper or lecture recital are required. Voice majors must show proficiency (to be determined by the Department of Music) in German, French and Italian diction prior to entering this degree program.

The Master of Music Education degree requires 36 semester hours, including 18 in music education, six in music literature, six in music theory, and six in thesis. Two additional courses in music education may be substituted for the thesis, and six hours of applied music may replace two music education courses.

All degree candidates must take MEd 532 (Seminar in Special Problems) and pass a final oral examination before a degree can be granted. The director of graduate music studies will serve as the general advisor of all graduate students in music. A committee of three graduate faculty members will also serve in an advisory capacity and administer the final oral examination.

Theatre Degree Requirements

The Master of Science degree in Theatre is a highly individualized program. Candidates for the degree must meet all general degree requirements in the College of Graduate Studies as listed elsewhere in this catalog. The student must complete a course load of 36 semester hours including 18 hours in a specialized area, 12 hours in practical individual studies, and 6 hours in a related elective (music, dance, art or philosophy). Six hours of thesis or a two-semester major project may be substituted for the 6 semester hours of fine arts or philosophy electives.

The student will choose from the following areas of specialization: technical production (set, costume or lighting design), acting/directing, or theatre management. Courses are selected from a variety of graduate and senior level offerings. Senior level courses used for graduate credit are enhanced with additional research and application work. Matching the student's needs with a practical and viable degree plan is an excellent format for the student seeking a practical or education-oriented degree in theatre.

Graduate Faculty

Associate Professor L. Randolph Babin
Choral music education
Associate Professor Robert Culbertson
Brass and music education
Associate Professor Wayne Dyess
Brass and music education
Associate Professor Barry W. Johnson
Brass and music education
Associate Professor Barbara Mathis

Voice
Associate Professor Raul S. Ornelas
Brass and music education
Associate Professor Andonia Placette
Theatre
Professor James M. Simmons
Woodwinds and music education

Applied Music (AM)

- 521, 522, 523 Graduate Applied Music** 2:2:0
For music education majors only. Graduate applied music in any instrument category, including composition. No more than six hours may be applied toward graduation in the music education degree.
- 541, 542, 543 Graduate Applied Music** 4:4:0
Graduate applied music in any instrument category, including composition. No more than 12 hours may be applied toward graduation in the Master of Music degree.

Music Education (MEd)

- 530 Advanced Instrumental Organization and Administration** 3:3:0
Organization and administration of public school bands and orchestras, with emphasis on rehearsal methods and techniques, library systems, program building, publicity procedures, contest preparation, techniques of class instruction and budget.
- 531 Advanced Choral Organization and Administration** 3:3:0
Philosophy, organization and administration of vocal music programs at the public school level; emphasis similar to MEd 530.
- 532 Seminar in Special Problems** 3:3:0
Research problems of special interest to students whose major emphasis is on the graduate field of music. Research paper required.
- 533 Basic Concepts in Music Education** 3:3:0
The historical, philosophical and psychological bases of music education.
- 535 Advanced Materials and Methods in Elementary Music** 3:3:0
Study of current trends, methods and materials in teaching elementary school music, with emphasis on individual study and presentations.
- 537 Advanced Instrumental Conducting** 3:3:0
Advanced interpretive problems and rehearsal techniques related to the conducting of various types of band and orchestral music.
- 538 Advanced Instrumental Methods** 3:3:0
The principles and techniques of teaching instrumental music.
- 539 Advanced Vocal Methods** 3:3:0
The principles and techniques of teaching vocal music.
- 5310 Microcomputer Applications in Music** 3:3:0
A study of microcomputers and music-related software, especially in the area of computer-assisted marching band charting and administrative duties.

Music Literature (MLt)

- 531 **Instrumental Literature** 3:3:0
Survey of music for large instrumental ensembles, chamber music and music for solo instruments. Emphasis on the concerto and symphony, the string quartet and sonata literature, with special attention to the needs and interests of students enrolled.
- 532 **Keyboard Literature** 3:3:0
Survey of keyboard literature from the pre-piano period to the present, including study of the piano sonata and other characteristic forms. Emphasis on performing, listening and analysis.
- 536 **Survey of the Baroque Era** 3:3:0
Comprehensive study of the period, beginning with the transition to Baroque, c. 1580, and ending c. 1750. Emphasis on advances in musical form, stylistic developments and performance practices.
- 537 **Survey of the Classic Era** 3:3:0
Comprehensive study of the period, beginning with the transition to classicism, c. 1730, and ending c. 1827. Emphasis on advances in the musical form, stylistic developments and performance practices.
- 538 **Survey of the Romantic Era** 3:3:0
Comprehensive study of the period, beginning with the transition to Romanticism, c. 1815, and ending c. 1910. Emphasis on advances in musical form, stylistic developments and performance practices.
- 539 **Twentieth Century Music** 3:3:0
A survey of major composers and schools of composition from Debussy to the present.

Music Theory (MTy)

- 532 **Advanced Band Arranging** 3:3:0
Advanced techniques in arranging music for various types of bands, and study of models by masters of band arranging.
- 533 **Advanced Counterpoint** 3:3:0
Application, through analysis and creative writing, of contrapuntal techniques in larger forms such as canon and fugue.
- 534 **Advanced Orchestration** 3:3:0
Techniques of scoring for various types of orchestras, and study of models by masters of orchestration.
- 535 **Twentieth Century Harmony** 3:3:0
The analysis and writing of music based on twentieth century harmonic techniques and devices.
- 536 **Pedagogy of Theory** 3:3:0
The principles and techniques of teaching the various branches of music theory, including principles of learning, history of theory, critical study of appropriate texts and supervised teaching of music theory classes.

Music (Mus)

- 530 **Special Projects in Music Education** 3:A:0
Individual projects for students with specialized needs in the music education area.
Prerequisite: Consent of Department Chair.
- 531 **Special Projects in Music Literature** 3:A:0
Individual projects for students with specialized needs in the music literature area.
Prerequisite: Consent of Department Chair.
- 532 **Special Projects in Music Theory** 3:A:0
Individual projects for students with specialized needs in the music theory area.
Prerequisite: Consent of Department Chair.
- 6390-6391 **Thesis**
Prerequisite: Approval of graduate advisor.

Theatre Courses (The)

533 Theatre Studies and Application

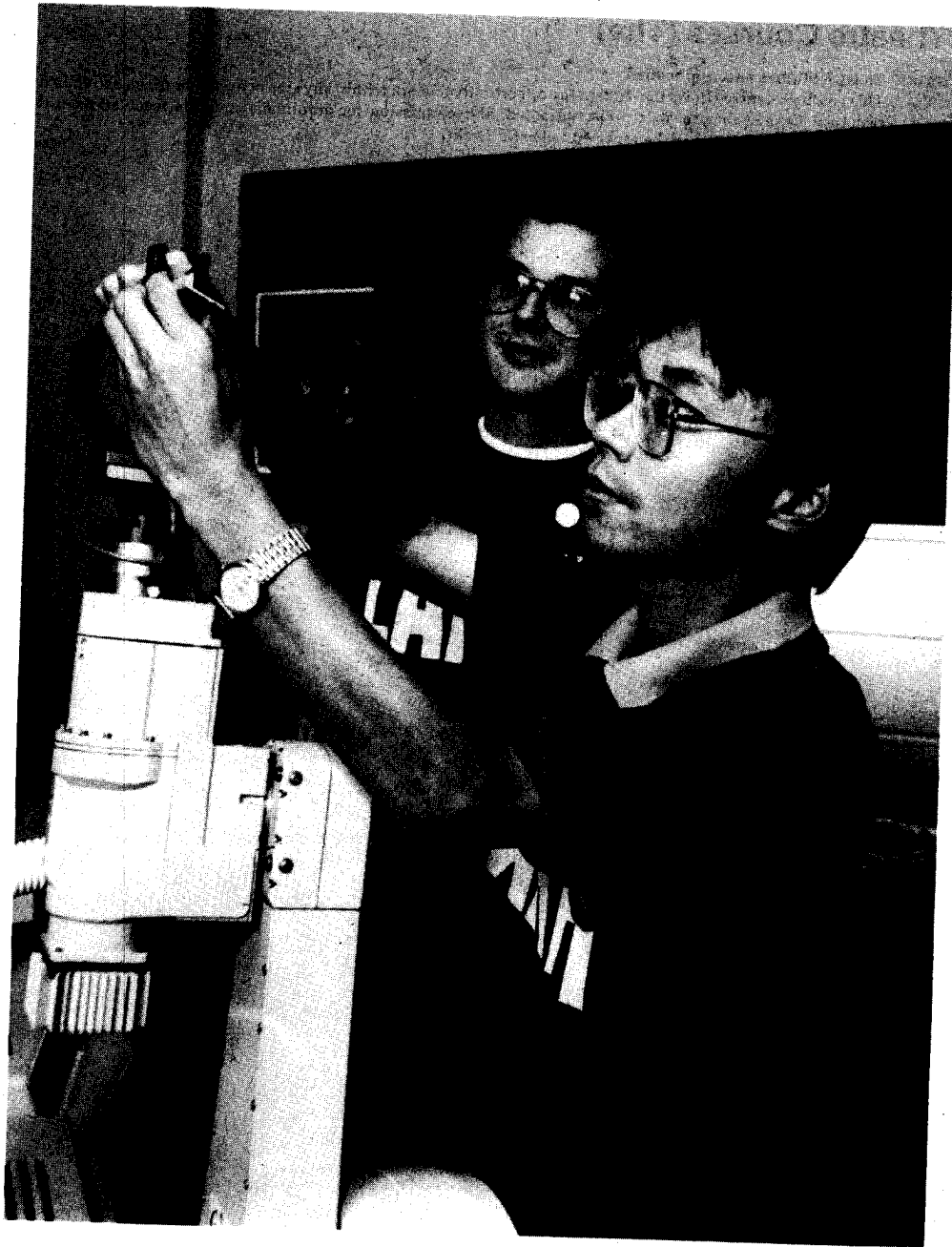
This graduate course allows the student the opportunity to work within any area of design or construction in the technical field of theatre. It is project-oriented, and permission for enrollment must be received from the instructing supervisor. May be repeated twice for credit.

5350 Theatre Individual Study

Individual study of special problems in theatre under faculty guidance.

6390-6391 Thesis

Prerequisite: Approval of graduate advisor.



Graduate students learn to design, program and operate robots in an engineering laboratory.

Directory of Personnel 1996-98

Board of Regents The Texas State University System

Jane C. Monday, <i>Chair (1997)</i>	Huntsville
Becky R. Espino, <i>Vice Chair (1997)</i>	Fort Stockton
William L. Cunningham, <i>Past Chair (1997)</i>	San Marcos
Thomas M. Moeller (2001)	Beaumont
Elizabeth T. Nash (1999)	San Marcos
Pollyanna A. Stephens (2001)	San Angelo
Macedonio Villarreal (2001)	Sugarland
Craig H. Vittitoe (1999)	Harlingen
Ray Zapata (1999)	Christoval

Lamar G. Urbanovsky, Chancellor

Administration

- Rex L. Cottle, *Ph.D., President*
- William G. Cale, Jr., *Ph.D., Executive Vice President for Academic Affairs*
- Susan K. Tellier, *M.B.A., Vice President for Finance and Operations*
- Joseph D. Deshotel, *J.D., Vice President for Administration and Counsel*
- Robert P. Bell, *M.Ed., Interim Executive Director for Institutional Advancement*
- Kevin Smith, *Ph.D., Associate Vice President for Academic Affairs*
- W. Brock Brentlinger, *Ph.D., Assistant to President Cottle*
- Kurt Czupryn, *Ph.D., Vice President for Student Affairs*

Council of Deans

- Fuseler, Beth, *Ph.D., Director of Library Services*
- Harper, Su-Zan, *M.Ed., Registrar*
- McAdams, LeBland, *Ph.D., Dean, College of Education and Human Development*
- Melvin, Cruse, *Ph.D., Interim Dean, College of Arts and Sciences*
- Moulton, Robert, *Ph.D., Associate Vice President for Research and Dean of Graduate Studies*
- Simmons, James M., *Ed.D., Dean, College of Fine Arts and Communication*
- Swerdlow, Robert A., *Ph.D., Interim Dean, College of Business*
- Trammell, Janice, *M.S., Interim Director of Public Services and Continuing Education*
- Young, Fred M., *Ph.D., Dean, College of Engineering*

The Graduate Council

- Moulton, Robert D., *Professor of Communication Disorders and Associate Vice President for Research and Dean of Graduate Studies*
- Andrews, Jean F., *Professor of Deaf Education*
- Blackwell, E. Harold, *Professor of Kinesiology and Chair, Department of Health, Kinesiology, and Dance*
- Chen, Daniel H., *Professor of Chemical Engineering*
- Hansen, Keith C., *Professor of Chemistry*
- Kelley, Gregory, *Assistant Professor of English*
- Moss, Jimmy D., *Associate Professor of Finance*

The Graduate Faculty 1996-98

The following list reflects the status of the graduate faculty of Lamar University as of Fall, 1995. The date following each name is the academic year of first service to the University and does not necessarily imply continuous service since that time.

- Akers, Hugh A., 1977, Professor of Chemistry**
B.S., University of California at Riverside; Ph.D., University of California at Berkeley
- Anderson, Adrian N., 1967, Professor of History**
B.S., M.A., Ph.D., Texas Tech University
- Anderson, Ross S., 1995, Assistant Professor of Biology**
B.A., Austin College; M.B.S., University of Colorado-Boulder; Ph.D., Baylor College of Medicine
- Andreev, Valentin V., 1990, Assistant Professor of Mathematics**
B.M., M.M., University of Sofia; Ph.D., University of Michigan
- Andrews, Jean, 1988, Professor of Deaf Education**
B.A., Catholic University; M.Ed., Western Maryland College; Ph.D., University of Illinois
- Babin, L. Randolph, 1968, Associate Professor of Music**
B.M.Ed., M.M.Ed., Ph.D., Louisiana State University
- Baker, Mary Alice, 1969, Associate Professor of Communication**
B.S., M.A., University of Oklahoma; Ph.D., Purdue University
- Bandyopadhyay, Soumava, 1992, Assistant Professor of Marketing**
B.S., Jadavpur University; M.S., Ph.D., University of Alabama
- Barnes, Cynthia, 1982, Professor of Office Administration**
B.S., Howard Payne University; M.Ed., Texas Tech University; Ed.D., North Texas State University
- Barton, Joel E. III, 1987, Associate Professor of Health, Kinesiology and Dance**
B.S., M.Ed., Ph.D., Texas A&M University
- Bean, Wendell C., 1968, Professor of Electrical Engineering**
B.A., B.S., Lamar University; M.S., Ph.D., University of Pittsburgh; Registered Professional Engineer
- Bethel, James, 1987, Associate Professor of Communication**
B.A., University of Tulsa; M.A., Ph.D., University of Oklahoma
- Bienenstock, Michael, 1994, Assistant Professor of Deaf Education**
B.S., Rochester Institute of Technology; M.A., Gallaudet University; Ph.D., University of Maryland at College Park
- Blackwell, E. Harold, 1990, Professor of Kinesiology and Chair, Department of Health, Kinesiology and Dance**
B.S.E., Delta State University; M.Ed., Memphis State University; Ed.D., University of Southern Mississippi
- Boatwright, Douglas, 1986, Associate Professor of Health, Kinesiology and Dance and Director of Graduate Programs**
B.S., University of Alabama at Birmingham; M.S., Ph.D., Louisiana State University
- Bost, David L., 1949, Professor of Educational Foundations**
B.A., Hardin-Simmons University; M.J., University of Texas; Ph.D., East Texas State University; Licensed Psychologist
- Briggs, Kenneth R., 1966, Regents' Professor of Education Psychology**
B.S., M.Ed., Ed.D., North Texas State University

- Brust, Melvin F., 1978, Professor of Management and Finance**
B.S.E.E., M.S.E.E., University of Texas; Ph.D., North Texas State University; Registered Professional Engineer.
- Burke, Charles M., 1970, Professor of School Curriculum; Director of Admissions and Advising, Department of Professional Pedagogy**
B.A. Southeastern Louisiana University; M.Ed., Louisiana State University; Ed.D., University of Southern Mississippi
- Carroll, John M., 1972, Professor of History**
A.B., Brown University; M.A., Providence College; Ph.D., University of Kentucky
- Carter, Keith D., 1989, Walles Chair Visiting Professor and Instructor of Art**
B.B.A., Lamar University
- Castle, David S., 1985, Associate Professor of Political Science**
B.A., M.A., Marshall University; Ph.D., University of Rochester
- Cavaliere, Frank, 1985, Professor of Business Law**
B.A., Brooklyn College; B.B.A., Lamar University; J.D., University of Texas-Austin
- Chen, Daniel H., 1982, Professor of Chemical Engineering**
B.S., National Cheng-Kung University; M.S., National Taiwan University; Ph.D., Oklahoma State University; Registered Professional Engineer
- Chiou, Paul, 1988, Professor of Mathematics**
B.Sc., National Chung Hsing University; M.A., Ph.D., University of Texas at Arlington
- Choi, Jai-Young, 1982, Professor of Economics**
B.A., Yonsei University; M.A., University of Kansas; Ph.D., University of Oklahoma
- Chu, Hsing-wei, 1979, Associate Professor of Industrial Engineering**
B.D. Tunghai University; M.S., Asian Institute of Technology; Ph.D., University of Texas; Registered Professional Engineer
- Cocke, David L., 1989, Jack M. Gill Professor of Chemistry**
B.S., University of Texas; M.S., Lamar University; Ph.D., Texas A&M University
- Colapret, John A., 1991, Assistant Professor of Chemistry**
B.A., Austin College; M.A., Ph.D., University of Texas-Austin
- Cooper, Mark J., 1984, Associate Professor of Early Childhood**
B.S.E., M.S.E., Henderson State University; Ph.D., Georgia State University
- Corder, Paul R., 1987, Professor of Mechanical Engineering**
B.S., M.S., Ph.D., Texas A&M University; Registered Professional Engineer
- Crawford, Carolyn H., 1994, Associate Professor of Educational Leadership**
B.A., M.Ed., Lamar University; Ph.D., Texas A&M University
- Crowder, Vernon Roy, 1967, Professor of Health, Kinesiology and Dance**
B.S., Lamar University; M.S., Ph.D., Louisiana State University
- Culbertson, Robert, 1974, Associate Professor of Music and Chair, Department of Music**
B.M., M.M., Northern Illinois University; D.M.A. University of Texas at Austin
- Daigrepoint, Lloyd M., 1981, Associate Professor of English**
B.A., M.A., Ph.D., Louisiana State University
- Daniali, Saeed, 1981, Professor of Civil Engineering**
B.S., Tehran Polytechnique; M.S. School of Engineering of Strasbourg; Ph.D., University of Lille; Registered Professional Engineer
- Deal, Randolph E., 1990, Associate Professor of Communication and Director of Speech and Hearing Clinic**
B.A., Oklahoma State University; M.C.D., Ph.D., University of Oklahoma

- DeLuke, Patricia**, 1992, *Instructor of Speech-Language Pathology*
B.S., M.S., Texas Woman's University
- Dobson, Mary E.**, 1990, *Instructor of Speech-Language Pathology*
B.S., Northeastern State University; M.S. University of Oklahoma
- Doerschuk, Peggy Israel**, 1993, *Assistant Professor of Computer Science*
B.S., University of Southwestern Louisiana; Ph.D., Tulane University
- Drapeau, Richard A.**, 1983, *Associate Professor of Business Statistics*
B.S., Arizona State University; M.B.A., Lamar University Ph.D., Texas A&M University
- Draženić** (See *Peruničić-Draženić*)
- Droddy, Frances**, 1980, *Instructor of Family and Consumer Sciences and Director, Early Childhood Development Center*
B.S., Northwestern Louisiana State University; M.S., Lamar University; Ph.D., Texas Woman's University
- Drury, Bruce R.**, 1971, *Professor of Political Science*
B.A., M.A., University of Nebraska; Ph.D., University of Florida
- DuBose, Elbert T., Jr.**, 1974, *Associate Professor of Political Science*
B.A., Southwest Texas State University; M.A., Texas Tech University; Ph.D., University of Oklahoma
- Dyess, Wayne**, 1977, *Associate Professor of Music*
B.M., Stephen F. Austin University; M.M. Catholic University of America; Ed.D University of Houston
- Elliff, Connie**, 1976, *Associate Professor of Family and Consumer Sciences*
B.S., Southwest Texas State University; M.S., Kansas State University; Ph.D., Texas A&M University; Registered Dietitian
- Esser, James K.**, 1976, *Professor of Psychology*
B.S., University of Iowa; Ph.D., Indiana University
- Fang, Xing**, 1995, *Assistant Professor of Civil Engineering*
B.S.C.E., Tsinghua University; M.S.C.E., Ph.D., University of Minnesota
- Fitzpatrick, Oney D., Jr.**, *Assistant Professor Psychology*
B.A., College of Wooster; M.A., University of Dayton; Ph.D., University of Houston
- Fitzpatrick, Phil**, 1977, *Associate Professor of Art*
B.F.A., M.F.A., Auburn University
- Ford, Allan M.**, 1993, *Research Professor of Chemical Engineering and Director of the Gulf Coast Hazardous Substance Research Center*
B.S., Iowa State University; Ph.D., Kansas State University
- Franklin, Thomas Claiborn**, 1992, *Assistant Professor of Audiology*
B.A., Auburn University at Montgomery; M.C.D., Auburn University; Ph.D., Florida State University
- Fritze, Ronald H.**, 1984, *Associate Professor of History*
B.A., Concordia College; M.A., M.L.S., Louisiana State University; Ph.D., University of Cambridge
- Gates, David G.**, 1963, *Professor of Industrial Engineering*
B.S., M.S., University of Arkansas; Ph.D., Oklahoma State University; Registered Professional Engineer
- Georgas, Marilyn D.**, 1962, *Professor of English*
B.A., Sam Houston State University; M.A., Lamar University; Ph.D., University of Texas

- Gilman, Kurt A.**, 1986, *Assistant Professor of Music*
B.M., Eastman School of Music; M.M., Texas Tech University; D.M.A., University of Texas-Austin
- Godkin, Roy Lynn**, 1981, *Professor of Management and Chair, Department of Management and Marketing*
A.B., Bethany Nazarene College; M.B.E., Nazarene Theological Seminary; M.A., Sangamon State University; Ph.D., North Texas State University
- Gonzales, Ramon**, 1988, *Instructor of Deaf Education*
B.S., M.S., Lamar University
- Goulas, Fara M.**, 1975, *Assistant Professor of Special Education and Reading*
B.A., Lamar University; M.A., University of Colorado; Ed.D., McNeese State University
- Gwin, Howell H., Jr.**, 1962, *Professor of History*
B.A., M.A., Ph.D., Mississippi State University
- Gwynn, Robert S.**, 1976, *Professor of English*
A.B., Davidson College; M.A., M.F.A., University of Arkansas
- Haiduk, Michael W.**, 1983, *Associate Professor of Biology*
B.S., M.S., Texas A&M University; Ph.D., Texas Tech University
- Hansen, Keith C.**, 1967, *Professor of Chemistry*
B.S., Lamar University; Ph.D., Tulane University
- Hargrove, W. Richard**, 1964, *Professor of Educational Psychology*
B.S., M.Ed., North Texas State University; Ed.D., George Peabody College for Teachers
- Harrel, Richard C.**, 1966, *Professor of Biology*
B.S., East Central State College; M.S. Ed., University of Georgia; Ph.D., Oklahoma State University
- Harvill, John B.**, 1984, *Associate Professor of Computer Science*
B.A., M.A., North Texas State University; Ph.D., Southern Methodist University
- Hawkins, Charles F.**, 1966, *Regents' Professor of Economics; and Chair, Department of Economics and Finance*
B.A., Lamar University; M.A., Ph.D., Louisiana State University
- Henry, Lula J.**, 1987, *Associate Professor of Reading*
B.S.Ed., Paul Quinn College; M.S.Ed., Arkansas State University; Ed.D., University of Missouri-Columbia
- Hinchey, Jane O.**, 1968, *Associate Professor of Family and Consumer Sciences and Chair, Department of Family and Consumer Sciences*
B.S., Winthrop College; M.S. University of Tennessee; Ph.D., Texas Woman's University
- Ho, Tho-Ching**, 1982, *Associate Professor of Chemical Engineering*
B.S., National Taiwan University; M.S., Ph.D., Kansas State University, Registered Professional Engineer
- Hoffman, LaVae**, 1995, *Instructor of Communication Disorders*
B.A.S., M.A., University of Minnesota
- Holmes, William R.**, 1990, *Associate Professor of Educational Leadership*
B.A., Oklahoma Baptist University; Th.M., New Orleans Baptist Theological Seminary; M.S., Ph.D., University of Southern Mississippi
- Holt, V. Raye**, 1975, *Professor of Health, Kinesiology and Dance*
B.S., Georgia State College for Women; M.S., Baylor University; Ed.D., University of Tennessee
- Holtz, Rolf F.**, 1989, *Assistant Professor of Psychology*
B.A., University of Washington; M.S.Ed., Ph.D., University of Southern California

- Hopper, Jack R.**, 1969, *Professor of Chemical Engineering and Chair, Department of Chemical Engineering*
B.S., Texas A&M University; M.Ch.E., University of Delaware; Ph.D., Louisiana State University; Registered Professional Engineer
- Hunt, Madelyn D.**, 1984, *Associate Professor of Biology*
B.S., Lamar University; M.P.H., Dr.P.H., University of Texas School of Public Health, Registered Medical Technologist (A.S.C.P.)
- Jack, Meredith M.**, 1977, *Associate Professor of Art*
B.F.A., University of Kansas; M.F.S., Temple University
- Johnson, Barry W.**, 1983, *Associate Professor of Music*
B.M.E., M.A., Sam Houston State University; Ed.D., University of Houston
- Jolly, Sonny**, 1971, *Professor of Health and Kinesiology*
B.S., M.S., Lamar University; M.Ed., Stephen F. Austin State University; Ed.D., North Texas State University
- Jones, Richard W.**, 1975, *Professor of Accounting and Chair, Department of Accounting*
B.S.C., Texas Christian University; M.A., University of Alabama; Ph.D., University of Arkansas; Certified Public Accountant
- Jordan, Donald L.**, 1979, *Associate Professor of Management Information Systems*
B.S., East Texas Baptist College; B.S., Lamar University; M.S., Air Force Institute of Technology; Ph.D., University of Houston
- Karlin, Andrea**, 1981, *Associate Professor of Reading*
B.A., Hunter College; M.A., Ph.D., University of New Mexico
- Kelley, Gregory G.**, 1993, *Assistant Professor of English*
B.A., Florida State University; M.A., Ph.D., Emory University
- King, Larry J.**, 1991, *Assistant Professor of Communication*
B.A., M.A., Bethany Nazarene College; Ph.D., University of Oklahoma
- Koehn, Enno**, 1984, *Professor of Civil Engineering and Chair, Department of Civil Engineering*
B.C.E., City University of New York; M.S., Columbia University; Ph.D., Wayne State University; Registered Professional Engineer
- Koh, Hikyoo**, 1981, *Professor of Computer Science*
B.A., Young-Nam; M.S., University of Hawaii; Ph.D., University of Pittsburgh
- Lane, James E.**, 1967, *Associate Professor of Special Education; Director, Professional Services*
B.A., Abilene Christian University; M.Ed., Lamar University; Ed.D., North Texas State University
- Lee, Huei**, 1991, *Assistant Professor of Management*
B.A. in Law, Fu Jen Catholic University; M.B.A., Eastern New Mexico University; Ph.D., Georgia State University
- Lee, Sun Chai**, 1992, *Assistant Professor of Civil Engineering*
B.S., M.S., University of Southwestern Louisiana; Ph.D., West Virginia University; Registered Professional Engineer
- Li, Ku-Yen**, 1978, *Professor of Chemical Engineering*
B.S., M.S., Cheng Kung University; Ph.D., Mississippi State University
- Lindorfer, Joanne**, 1980, *Associate Professor of Psychology*
B.S., Loyola University, Chicago; M.S., Ph.D., University of Texas
- Loges, Max**, 1991, *Assistant Professor of English*
B.A., Northwestern Oklahoma State University; M.Div., Southwestern Baptist Theological Seminary; M.A., Fort Hays State University; Ph.D., Oklahoma State University

- Lokensgard, Lynne**, 1973, *Associate Professor of Art*
B.A., M.A., University of Minnesota; Ph.D., University of Kansas
- Maesumi, Mohsen**, 1991, *Assistant Professor of Mathematics*
B.A., Princeton University; M.S., Yale University; Ph.D., New York University
- Mantz, Peter A.**, 1983, *Research Professor of Civil Engineering*
B.S., Newcastle University; M.S., Southampton University; Ph.D., London University;
Chartered Engineer (U.K.)
- Marriott, Richard G.**, 1976, *Professor of Psychology and Chair, Department of Psychology*
B.S., Weber State College; M.A., Ph.D., University of New Mexico
- Martin, Gabriel A.**, 1989, *Associate Professor of Communication Disorders and Interim
Chair, Department of Communication Disorders*
B.S., M.S., Lamar University; Ed.D., University of Southern Mississippi
- Matheson, Alec L.**, 1983, *Professor of Mathematics and Interim Chair, Department of
Mathematics*
B.S., University of Washington; Ph.D., University of Illinois
- Mathis, Barbara Thomas**, 1990, *Associate Professor of Music*
B.M., M.M., North Texas State University; Ph.D., University of North Texas
- Maxum, Bernard J.**, 1992, *Professor of Electrical Engineering and Chair, Department of
Electrical Engineering*
B.S., University of Washington; M.S., University of Southern California; Ph.D., University
of California, Berkeley; Registered Professional Engineer
- Mayer, Bradley W.**, 1994, *Assistant Professor of Management*
B.B.A., B.S.Ed., University of North Dakota; M.B.A., Mankato State University; Ph.D.,
University of North Texas
- McAdams, LeBland**, 1967, *Professor of Family and Consumer Sciences and Dean, College of
Education and Human Development*
B.S., Sam Houston State University; M.Ed., University of Houston; Ph.D., Texas Woman's
University
- McCaskill, Ed**, 1987, *Associate Professor of Science Education*
B.S., M.Ed., Sam Houston State University; Ed.D., East Texas State University
- McLaughlin, George**, 1959, *Professor of Educational Leadership*
B.S., Lamar University; Ed.D., University of North Texas
- Meeks, Donna M.**, 1995, *Associate Professor of Art and Chair, Department of Art*
B.A., M.A.T., University of Louisville; M.F.A., University of Wisconsin-Milwaukee
- Mei, Harry T.**, 1960, *Professor of Mechanical Engineering*
B.S., National Taiwan University; M.S., Ph.D., University of Texas; Registered Professional
Engineer
- Montano, Carl B.**, 1981, *Professor of Economics*
B.S., M.S., University of the Philippines; Ph.D., Michigan State University
- Morgan, William E.**, 1972, *Professor of Civil Engineering*
B.S., U.S. Naval Academy; B.S., U.S. Naval Post Graduate School; M.S., University of
Alaska; Ph.D., University of Texas; Registered Professional Engineer
- Moss, Jimmy D.**, 1986, *Associate Professor of Finance*
B.S., M.B.A., D.B.A., Mississippi State University
- Moulton, Robert D.**, 1974, *Regents' Professor of Communication Disorders and Associate
Vice President for Research and Dean of Graduate Studies*
B.S., M.S., University of Utah; Ph.D., Michigan State University
- Newman, Jerry A.**, 1962, *Regents' Professor of Art*
B.F.A., University of Texas; M.F.A., University of Southern California

- Nichols, Paula, 1988, Assistant Professor of Family and Consumer Sciences and Director, Spindletop Center for Excellence in Teaching and Technology**
B.S., Baylor University; M.Ed., Ed.D., University of Houston
- Nicoletto, Paul F., 1995, Assistant Professor of Biology**
B.S., Appalachian State University; M.S., Virginia Polytechnique Institute and State University; Ph.D., University of New Mexico
- Nordgren, Joseph E., 1990, Assistant Professor of English**
B.A., University of Minnesota; M.A., Ph.D., Florida State University
- Novak, E. Shawn, 1990, Assistant Professor of Accounting**
B.S., Virginia Tech; M.P.A., University of Texas; Ph.D., University of Houston; Certified Public Accountant
- Ogilvie, Clint, 1991, Associate Professor of Educational Leadership**
B.S., North Texas State University; M.Ed., North Texas State University; Ed.D., East Texas State University
- Ornelas, Raul Sosa, 1972, Associate Professor of Music**
B.M., University of Texas; M.M.Ed., McNeese State University; D.M.A., University of Southern Mississippi
- Ortego, James Dale, 1968, Regents' Professor of Chemistry and Chair, Department of Chemistry**
B.S., University of Southwestern Louisiana; Ph.D., Louisiana State University
- Osborne, Lawrence, 1990 Associate Professor of Computer Science and Chair, Department of Computer Science**
B.S., Southeast Missouri State University; M.A., M.S., Ph.D., University of Missouri - Rolla
- Pannappalli, Usharani, 1995, Assistant Professor of Communication Disorders**
B.Sc., M.Sc., All India Institute of Speech and Hearing; Ph.D., Purdue University
- Pemberton, Amy, 1984, Associate Professor of Family and Consumer Sciences**
B.S., Lamar University; M.S., Lamar University; Ph.D., University of Texas School of Public Health-Houston; Registered Dietitian
- Peruničić-Draženočić, Branislava, 1993, Professor of Electrical Engineering**
Candidate of Technical Sciences, Institute of Automatics and Telemechanics of the USSR Academy of Sciences; Ph.D., Sarajevo University
- Placette, Adonia D., 1985, Associate Professor of Theatre**
B.S., M.S., Lamar University; Ph.D., Texas Tech University
- Plugge, Carol, 1993, Assistant Professor of Health, Kinesiology and Dance**
B.S., M.S., University of New Mexico; Ph.D., Texas A&M University
- Porter, Jay, 1995, Assistant Professor of Electrical Engineering**
B.S., M.S., Ph.D., Texas A&M University
- Powell, Annette, 1990, Instructor of Speech-Language Pathology**
B.S., M.S., Lamar University
- Price, Donald I., 1983, Professor of Economics**
B.A., Hendrix College; M.A., Ph.D., University of Arkansas
- Price, R. Victoria, 1972, Professor of Modern Languages**
B.A., Tift College; M.A., M.Ed., Lamar University; M.A., Ph.D., Rice University
- Priest, Dale G., 1986, Associate Professor of English**
B.A., Lamar University; M.A., Ph.D., Rice University
- Read, David, 1965, Regents' Professor of Computer Science**
B.S., Lamar University; M.S., North Texas State University; Ph.D., University of Houston

- Reddy, G. N.**, 1990, *Assistant Professor in the Department of Electrical Engineering*
B.E., NS Eng College; M.Sc.Eng., PSG Tech; M.S., Ph.D, IIT
- Rice, Desmond V.**, 1987, *Associate Professor of Reading and Educational Technology*
B.A., Avondale College, N.S.W., Australia; M.A., San Francisco State University; Ed.D.,
University of Southern California
- Roth, Lane**, 1978, *Associate Professor of Communication*
B.A., New York University; M.A., Ph.D., Florida State University
- Sanderson, James**, 1989, *Associate Professor of English*
B.A., Southwest Texas State University; M.A., Southwest Texas State University; Ph.D.,
Oklahoma State University
- Satterwhite, Marc T.**, 1990, *Assistant Professor of Music*
B.M., Michigan State University; M.M., D.M., Indiana University
- Saur, Pamela S.**, 1988, *Associate Professor of English*
B.A., University of Iowa; M.A., University of Iowa; M.Ed., University of Massachusetts;
Ph.D., University of Iowa
- Sen, Kabir C.**, 1993, *Professor of Marketing*
B. Tech., Indian Institute of Technology; M.B.A., Cranfield School of Management; M.S.,
Ph.D., Washington University
- Sheppard, Sallye J.**, 1980, *Professor of English and Chair, Department of English*
B.A., M.A., Texas Christian University; M.R.E., Brite Divinity School; Ph.D., Texas
Woman's University
- Shukla, Shyam S.**, 1985, *Associate Professor of Chemistry*
M.Sc., University of Saskatchewan; Ph.D., Clarkson College of Technology
- Simmons, James M.**, 1970, *Professor of Music and Dean, College of Fine Arts and
Communication*
B.S., Memphis State University; M.M., University of Houston; Ed.D., McNeese State
University
- Simon, William E.**, 1990, *Professor of Mechanical Engineering and Chair, Department of
Mechanical Engineering*
B.S., University of Southwestern Louisiana; M.S., University of Houston; Ph.D, University
of Houston; Registered Professional Engineer
- Sisk, Dorothy**, 1990, *Conn Professor of Gifted Education*
B.S., Mount Union College; M.A., California State University Long Beach; Ed.D.,
University of California at Los Angeles
- Smith, Kevin B.**, 1981, *Professor of Sociology and Interim Associate Vice President for
Academic Affairs*
B.S., Texas A&M University; M.A., Ph.D., Louisiana State University
- Smith, Marshall M.**, 1989, *Assistant Professor of Audiology*
B.S., Auburn University; M.S., Pennsylvania State University; Ph.D., Florida State
University
- Spradley, Larry W.**, 1972, *Professor of Business Statistics*
B.A., Stephen F. Austin State University; M.Th., Southern Methodist University; M.S.,
Lamar University; Ph.D., Texas A&M University
- Storey, John W.**, 1968, *Regents' Professor of History and Chair, Department of History*
B.A., Lamar University; M.A., Baylor University; Ph.D., University of Kentucky
- Sutton, Walter A.**, 1963, *Professor of History*
B.A., William Marsh Rice University; M.A., Ph.D., University of Texas
- Swerdlow, Robert A.**, 1978, *Professor of Marketing and Interim Dean, College of Business*
B.B.A., M.B.A., Lamar University; Ph.D., University of Arkansas

- Thomas, James L., 1983, Associate Professor of Industrial and Mechanical Engineering**
B.S.I.E., Oklahoma State University; M.S.I.E., Texas Technological College; Ph.D., Texas Tech University
- Thompson, Bob, 1985, Professor of Educational Administration and Supervision and Chair, Department of Educational Leadership**
B.S., Abilene Christian University; M.Ed., Ph.D., East Texas State University
- Tucker, Jerry R., 1971, Associate Professor of Educational Administration and Supervision**
B.S., The University of Texas; M.Ed., Trinity University; Ph.D., Texas A&M University
- Utter, Glenn H., 1972, Professor of Political Science and Chair, Department of Political Science**
B.A., State University of New York at Binghamton; M.A., Ph.D., State University of New York at Buffalo
- Vanderleeuw, James M., 1988, Assistant Professor of Political Science**
B.A., Ramapo College; M.A., University of Nevada-Reno; Ph.D., University of New Orleans
- Varick, Celia B., 1995, Assistant Professor of Accounting**
B.A., University of Southern Maine; M.A., University of Iowa; Ph.D., University of Arkansas
- Walker, James L., Jr., 1969, Professor of Psychology**
B.A., Baylor University; Ph.D., Texas Tech University
- Waller, Kimberly A., 1994, Assistant Professor of Family and Consumer Sciences**
B.S., Central Michigan University; M.A., Michigan State University; Ph.D., Kansas State University
- Warren, Michael E., 1966, Professor of Biology and Chair, Department of Biology**
B.A., M.A., Ph.D., University of Texas
- Watt, Joseph T., Jr., 1965, Professor of Electrical Engineering**
B.A., B.S., William Marsh Rice University; M.S., Ph.D., University of Texas; Registered Professional Engineer
- Watts, Doyle, 1985, Professor of Educational Psychology, and Chair, Department of Professional Pedagogy**
B.S., Abilene Christian University; M.S., Ed.D., Texas Tech University
- Westgate, James W., 1989, Assistant Professor of Geology**
B.S., College of William and Mary; M.S., University of Nebraska-Lincoln; M.S., Southwest Missouri State University; Ph.D., University of Texas-Austin
- White, William F., 1982, Professor of Professional Pedagogy**
A.B., St. Bernard's College; Ed.M., University of Buffalo; Ph.D., SUNY
- Wills, Curtis E., 1971, Associate Professor of Counseling and Development**
B.S., M.Ed., Sam Houston State University; Ed.D., North Texas State University; Licensed Psychologist
- Wooster, Ralph A., 1955, Regents' Professor of History, Dean of Faculties and Associate Vice President for Academic and Student Affairs**
B.A., M.A., University of Houston; Ph.D., University of Texas
- Wright, Stuart A., 1985, Associate Professor of Sociology**
M.A., M.A., University of Houston; Ph.D., University of Connecticut
- Yaws, Carl L., 1975, Professor of Chemical Engineering**
B.S., Texas A&I University; M.S., Ph.D., University of Houston; Registered Professional Engineer
- Yearwood, Stephenie, 1988, Assistant Professor of English**
B.A., Tulane University; M.A., Ph.D., University of Texas-Austin

Young, Fred M., 1978, Professor of Mechanical Engineering and Dean, College of Engineering
B.S.M.E., M.S.M.E., Ph.D., Southern Methodist University; Registered Professional Engineer

Zaloom, Victor A., 1981, Professor of Industrial Engineering and Chair, Department of Industrial Engineering
B.S.I.E., M.S.E., University of Florida; Ph.D. University of Houston; Registered Professional Engineer

Zhang, Wen-Ran, 1990, Associate Professor of Computer Science
B.S., Shanxi Mining Institute; M.S., Ph.D, University of South Carolina

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